Appendix B

Database Tables

Appendix B: Database Tables

This Appendix supplements Chapter 2 with additional estimates of the characteristics of the surface impoundment sampling frame. The first section of the appendix presents tables of various data elements from the survey database, with standard errors where appropriate. All of the data presented are extrapolated estimates; no sample-level data are shown. The tables in this first section are Table B-2 through Table B-18. The second section of the appendix focuses on the chemical data, and presents comparisons of the chemical data in the survey (consolidated) database to the chemical data in the risk input database, as well as other chemical data comparisons relevant to the Study. This section includes Table B-19 through Table B-30, and Figures B-1 through B-33.

Table B-1 lists all of the tables and figures in this appendix, and provides for each the survey question or other data source used, along with references to relevant sections of this report that describe data processing methods, protocols, and specifications used to create the data displayed in the tables. The primary section referenced is Appendix A and its attachments, which provide background on the sampling methodology, survey, and database development, including the consolidated survey and risk input databases. For example, Attachment A1 is the actual three-part survey forms, which have the questions (number and text) referred to in Table B-1. The information in Appendix A and its attachments provides the context for understanding the data provided in the tables in this appendix.

How to read and interpret the tables and the standard errors. Most of the tables in this appendix include the standard errors for each population estimate, usually in parentheses but sometimes as separate tables (e.g., Tables B-19b and B-20b). Estimates that may be unreliable because of a high relative standard error are indicated with an asterisk. The standard error is a common statistical measure of the precision of an estimate. It is the standard deviation of the sampling distribution of the estimate. That is, if one were to replicate the sample selection and data collection procedures many times in exactly the same way and with exactly the same population, the standard error of the estimate is the standard deviation of the values of that estimate generated by the samples. Section A.5.2 (Appendix A) explains how standard errors were calculated for the surface impoundment study.

Two common applications of standard errors are for computing relative standard errors, which are unit-free measures of precision, and for computing confidence interval estimates of population parameters. Both these uses of standard errors are summarized briefly below.

If $se(\hat{\theta})$ represents the standard error of the estimate, θ, then the relative standard error is the ratio of the standard error divided by the estimate itself, i.e.,

$$RSE(\hat{\theta}) = \frac{se(\hat{\theta})}{\hat{\theta}} \quad .$$

Estimates in Tables B-1 through B-30 that have relative standard errors exceeding 50 percent have been flagged (with an asterisk) as possibly being unreliable.

Because the estimates in Tables B-1 through B-30 are all based on a large sample of facilities, a 95 percent confidence interval estimate of the population total, mean, or proportion is the point estimate, $\hat{\theta}$, plus or minus two standard errors, i.e.,

$$\hat{\theta} \pm 2\, se(\hat{\theta}) \quad .$$

Additional details on the calculation of standard errors and confidence intervals may be found in section A.5.2 of Appendix A.

Table B-1. Description of Tables and Figures

Table Number	Description: Survey Question, Data Sources
Table B-1. List of Tables and Figures	(This table) Summarizes content and data sources for Appendix B tables and figures, including long survey question number and relevant Appendix A sections.
Table B-2. Characteristics of Industrial Impoundments	Number of all impoundments, number of impoundments with chemicals and pH of concern: B2; impoundment level characteristics: C6 to C9a; wastewater quantities: C16 or from impoundment areas and depths: from diagrams/maps provided in response to B3 and C10 (see section A.2.5)
Table B-3. Estimated Number of Facilities with Chemicals/pH of Concern by EPA Region	Facility location (address, city, state): A2
Table B-4. Estimated Number of Impoundments with Chemicals/pH of Concern by EPA Region	
Table B-5. Estimated Number of Facilities with Chemicals/pH of Concern by 2-Digit Standard Industrial Classification (SIC) Code	SIC code: screener data or, if missing, obtained from other sources (see section A.1.2)
Table B-6. Estimated Number of Impoundments with Chemicals/pH of Concern by 2-Digit Standard Industrial Classification (SIC) Code	
Table B-7. Estimated Quantity of Wastewater (metric tons) Managed in Impoundments with Chemicals/pH of Concern, by 2-Digit Standard Industrial Classification (SIC) Code	Wastewater quantities: C16 or from impoundment areas and depths: from diagrams/maps provided in response to B3 and C10 (see section A.2.5)
Table B-8. Distribution of Ages of Impoundments with Chemicals/pH of Concern in Operation in Year 2000	Ages of impoundments: C1 (midpoint of year range), C2a (operating status in 2000)
Table B-9. Distribution of Lifetimes of Impoundments with Chemicals/pH of Concern that have Permanently Ceased Receiving Wastes	Impoundment lifetimes: C1 (midpoint of year range), C2a (closure status); Year impoundment ceased receiving wastes: C2b
Table B-10. Estimated Number of Facilities with Chemicals/pH of Concern by Treatment Type	Treatment types: C18 (treatment, storage, disposal status); C20:types of treatment being performed.
Table B-11. Estimated Number of Lined Impoundments with Chemicals/pH of Concern by 2-Digit Standard Industrial Classification (SIC) Code	Liner status: standardized data based on C12 (see liner tables in consolidated database, section A.4.1 and Attachment A7).

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Table B-1. (continued)

Table Number	Description: Survey Question, Data Sources
Table B-12. Frequency of Liner Usage for Impoundments by Age of Impoundment	Time when impoundments began receiving wastes: C1, C2; liner status: standardized data based on C12 (see liner tables in consolidated database, section A.4.1 and Attachment A7); liner failure determination: C14a (oldest failure event)
Table B-13. Estimated Number of Overtopping Events at Impoundments with Chemicals/pH of Concern by Duration	Number and duration of overtopping events : C25
Table B-14. Estimated Number of People, Residences, Drinking Water Wells, and Schools within Distance Ranges of the Population of Impoundments with Chemicals/pH of Concern	Estimates for the number of residences, drinking water wells, and schools: B3 maps, U.S. Census data, GIS analysis (see section A.3.1)
Table B-15. Estimated Number of Impoundments with Chemicals/pH of Concern that had a State or Local Permit for Wastewater, Sludge Management, Groundwater Protection, or Air Emissions by 2-Digit SIC Code	Determination of whether impoundment is under a state or local permit: C8a
Table B-16. Estimated Number of Impoundments with Chemicals/pH of Concern which are Solid Waste Management Units at RCRA Treatment, Storage, and Disposal Facilities (TSDs) Evaluated During a RCRA Facility Assessment, or Similar Action by 2-Digit SIC Code	Determination of whether impoundment was evaluated during a RCRA Facility Assessment: C9a
Table B-17. Estimated Number of Impoundments with Chemicals/pH of Concern which Received Any Waste Exempt or Excluded from Regulation by 2-Digit SIC Code	Determination of whether impoundment received exempt/excluded waste and exemption/exclusion type: C7a (see Attachment A2.3, coding table EX_LIST for a listing of exemptions/exclusions by regulatory code).
Table B-18. Estimated Quantity (metric tons) of Wastewater Managed in Impoundments with Chemicals/pH of Concern that is Exempt or Excluded from Regulation	Determination of whether impoundment received exempt/excluded waste and exemption/exclusion type: C7a; estimated quantity: C7b (midpoint of the percentage range), C16 (typical wastewater quantity) (see Attachment A2.3, coding table EX_LIST for a listing of exemptions/exclusions by regulatory code)
Table B-19a. Chemicals: Presence and Volume in Wastewater (for Impoundments with Chemicals/pH of Concern)	Chemical presence in wastewater: C23a, C24a, or C24c (mark as present but quantity unknown or reported concentration or flux detection); wastewater quantities: C23a, C24a, and C24c (concentration or mass per unit time), (consolidated database - see section A.4.1 and Attachments A6, A7); C16 (wastewater quantity)
Table B-19b. Standard Errors for Chemicals: Presence and Volume in Wastewater (for Impoundments with Chemicals/pH of Concern)	

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Table B-1. (continued)

Table Number	Description: Survey Question, Data Sources
Table B-20a. Chemicals: Presence and Volume in Sludge (for Impoundments With Chemicals/pH of Concern)	Chemical presence in sludge: C23b, C24b, or C24d (mark as present but quantity unknown or reported concentration or flux detection); sludge chemical quantities: C23b, C24b, and C24d (concentration or mass per unit time), (consolidated database - see section A.4.1 and Attachments A6, A7); C16 (sludge quantity)
Table B-20b Standard Errors for Chemicals: Presence and Volume in Sludge (for Impoundments With Chemicals/pH of Concern)	
Table B-21. Comparison of Survey Data and Risk Input Data: Chemical Categories for Wastewater and Sludge at Influent, In Impoundment, and Effluent Sampling Points	Chemical presence in wastewater, sludge: C23, C24 (consolidated database - see section A.4.1 and Attachments A6, A7; risk input database - see section A.4.2 and Attachment A8); C16 (wastewater and sludge quantity)
Table B-22. Chemical Presence in Wastewater Influent by SIC Code (Survey Database)	Chemicals presence in influent: C24a (mark as present but quantity unknown or reported concentration or flux detection) (consolidated database - see section A.4.1 and Attachments A6, A7)
Table B-23. Chemical Presence in Wastewater In Impoundment by SIC Code (Survey Database)	Chemical presence in wastewater in impoundment: C23a (mark as present but quantity unknown or reported concentration or flux detection) (consolidated database - see section A.4.1 and Attachments A6, A7)
Table B-24. Chemical Presence in Wastewater Effluent by SIC Code (Survey Database)	Chemical presence in effluent: C24c (mark as present but quantity unknown or reported concentration or flux detection) (consolidated database - see section A.4.1 and Attachments A6, A7)
Table B-25. Chemical Presence in Sludge by SIC Code (Survey Database)	Chemical presence in sludge: C23b, C24b, or C24d (mark as present but quantity unknown or reported concentration or flux detection) (consolidated database - see section A.4.1 and Attachments A6, A7)
Table B-26. Chemical Presence in Wastewater Influent by SIC Code (Risk Input Database)	Chemical presence in influent: all chemicals listed in the risk input data for wastewater influent (risk input database - see section A.4.2 and Attachment A8)
Table B-27. Chemical Presence in Wastewater In Impoundment by SIC Code (Risk Input Database)	Chemical presence in wastewater in impoundment: all chemicals listed in the input risk data set for wastewater in impoundment (risk input database - see section A.4.2 and Attachment A8)
Table B-28. Chemical Presence in Sludge by SIC Code (Risk Input Database)	Chemical presence in sludge: all chemicals listed in the risk input data for sludge (risk input database - see section A.4.2 and Attachment A8)
Table B-29. Chemicals Cooccurring in Wastewater by Human Health Effect, Number of Cooccurring Chemicals, and Facility at which they Cooccur	If the number of chemicals in wastewater (C23a, C24a, or C24c) across all impoundments at a facility for a particular target human health effect was greater than 2, then the number and list cooccurring chemicals were reported by target health effect, number of cooccurrences, and facility (consolidated database - see section A.4.1 and Attachments A6, A7)

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Table B-1. (continued)

Table Number	Description: Survey Question, Data Sources
Table B-30. Facility-Level Cooccurrence of Chemicals in Wastewater by Human Health Effect (Survey Database)	Query based on chemical presence in wastewater: C23a, C24a, C24c (consolidated database: PQU or reported detection - see section A.4.1 and Attachments A6, A7)
Table B-31. Facility-Level Cooccurrence of Chemicals in Sludge by Human Health Effect (Survey Database)	Query based on chemical presence in sludge: C23b, C24b, C24d (consolidated database: PQU or reported detection - see section A.4.1 and Attachments A6, A7)
Table B-32. Impoundment-Level Cooccurrence of Chemicals in Wastewater by Human Health Effect (Survey Database)	Query based on chemical presence in wastewater: C23a, C24a, C24c (consolidated database: PQU or reported detection - see section A.4.1 and Attachments A6, A7)
Table B-33. Impoundment-Level Cooccurrence of Chemicals in Sludge by Human Health Effect (Survey Database)	Query based on chemical presence in sludge: C23b, C24b, C24d (consolidated database: PQU or reported detection - see section A.4.1 and Attachments A6, A7)
Table B-34. Facility-Level Cooccurrence of Chemicals in Wastewater by Human Health Effect (Risk Input Database)	Query based on chemical presence in wastewater: C23a, C24a, C24c (risk database: PQU, reported detection, or reported below detection - see section A.4.2 and Attachment A8)
Table B-35. Facility-Level Cooccurrence of Chemicals in Sludge by Human Health Effect (Risk Input Database)	Query based on chemical presence in sludge: C23b, C24b, C24d (risk database: PQU, reported detection, or reported below detection - see section A.4.2 and Attachment A8)
Table B-36. Impoundment-Level Cooccurrence of Chemicals in Wastewater by Human Health Effect (Risk Input Database)	Query based on chemical presence in wastewater: C23a, C24a, C24c (risk database: PQU, reported detection, or reported below detection - see section A.4.2 and Attachment A8)
Table B-37. Impoundment-Level Cooccurrence of Chemicals in Sludge by Human Health Effect (Risk Input Database)	Query based on chemical presence in sludge: C23b, C24b, C24d (risk database: PQU, reported detection, or reported below detection - see section A.4.2 and Attachment A8)
Table B-38. 50^{th} and 90^{th} Percentile Wastewater Concentrations in Impoundment for Selected Chemicals	For selected Toxicity Characteristic (TC) chemicals: concentration percentiles from C23a (consolidated database - see section A.4.1 and Attachments A6, A7)
Figure B-1. Arsenic influent and effluent wastewater concentrations.	For arsenic: influent (C24a) and effluent (C24c) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7)
Figure B-2. Arsenic influent wastewater concentrations by decharacterization status.	For arsenic: influent (C24a) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7); decharacterization status: C6
Figure B-3. Arsenic wastewater concentrations in impoundment (survey data versus risk input data).	For arsenic: wastewater in impoundment (C23a) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7); concentrations (risk input database - see section A.4.2 and Attachment A8)

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Table B-1. (continued)

Table Number	Description: Survey Question, Data Sources
Figure B-4. Barium influent and effluent wastewater concentrations.	For barium: influent (C24a) and effluent (C24c) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7)
Figure B-5. Barium influent wastewater concentrations by decharacterization status.	For barium: influent (C24a) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7); decharacterization status: C6
Figure B-6. Barium wastewater concentrations in impoundment (survey data versus risk input data).	For barium: wastewater in impoundment (C23a) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7); concentrations (risk input database - see section A.4.2 and Attachment A8)
Figure B-7. Benzene influent and effluent wastewater concentrations.	For benzene: influent (C24a) and effluent (C24c) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7)
Figure B-8. Benzene influent wastewater concentrations by decharacterization status.	For benzene: influent (C24a) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7); decharacterization status: C6
Figure B-9. Benzene wastewater concentrations in impoundment (survey data versus risk input data).	For benzene: wastewater in impoundment (C23a) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7); concentrations (risk input database - see section A.4.2 and Attachment A8)
Figure B-10. Cadmium influent and effluent wastewater concentrations.	For cadmium: influent (C24a) and effluent (C24c) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7)
Figure B-11. Cadmium influent wastewater concentrations by decharacterization status.	For cadmium: influent (C24a) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7); decharacterization status: C6
Figure B-12. Cadmium wastewater concentrations in impoundment (survey data versus risk input data).	For cadmium: wastewater in impoundment (C23a) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7); concentrations (risk input database - see section A.4.2 and Attachment A8)
Figure B-13. Chloroform influent and effluent wastewater concentrations.	For chloroform: influent (C24a) and effluent (C24c) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7)
Figure B-14. Chloroform influent wastewater concentrations by decharacterization status.	For chloroform: influent (C24a) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7); decharacterization status: C6
Figure B-15. Chloroform wastewater concentrations in impoundment (survey data versus risk input data).	For chloroform: wastewater in impoundment (C23a) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7); concentrations (risk input database - see section A.4.2 and Attachment A8)

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Table B-1. (continued)

Table Number	Description: Survey Question, Data Sources
Figure B-16. Chromium influent and effluent wastewater concentrations.	For chromium: influent (C24a) and effluent (C24c) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7)
Figure B-17. Chromium influent wastewater concentrations by decharacterization status.	For chromium: influent (C24a) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7); decharacterization status: C6
Figure B-18. Chromium wastewater concentrations in impoundment (survey data versus risk input data).	For chromium: wastewater in impoundment (C23a) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7); concentrations (risk input database - see section A.4.2 and Attachment A8)
Figure B-19. Cresol influent and effluent wastewater concentrations.	For cresols: influent (C24a) and effluent (C24c) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7)
Figure B-20. Cresol influent wastewater concentrations by decharacterization status.	For cresols: influent (C24a) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7); decharacterization status: C6
Figure B-21. Cresol wastewater concentrations in impoundment (survey data versus risk input data).	For cresols: wastewater in impoundment (C23a) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7); concentrations (risk input database - see section A.4.2 and Attachment A8)
Figure B-22. Lead influent and effluent wastewater concentrations.	For lead: influent (C24a) and effluent (C24c) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7)
Figure B-23. Lead influent wastewater concentrations by decharacterization status.	For lead: influent (C24a) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7); decharacterization status: C6
Figure B-24. Lead wastewater concentrations in impoundment (survey data versus risk input data).	For lead: wastewater in impoundment (C23a) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7); concentrations (risk input database - see section A.4.2 and Attachment A8)
Figure B-25. Mercury influent and effluent wastewater concentrations.	For mercury: influent (C24a) and effluent (C24c) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7)
Figure B-26. Mercury influent wastewater concentrations by decharacterization status.	For mercury: influent (C24a) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7); decharacterization status: C6
Figure B-27. Mercury wastewater concentrations in impoundment (survey data versus risk input data).	For mercury: wastewater in impoundment (C23a) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7); concentrations (risk input database - see section A.4.2 and Attachment A8)

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Table B-1. (continued)

Table Number	Description: Survey Question, Data Sources
Figure B-28. Methyl ethyl ketone (MEK) influent and effluent wastewater concentrations.	For MEK: influent (C24a) and effluent (C24c) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7)
Figure B-29. Methyl ethyl ketone (MEK) influent wastewater concentrations by decharacterization status.	For MEK: influent (C24a) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7); decharacterization status: C6
Figure B-30. Methyl ethyl ketone (MEK) wastewater concentrations in impoundment (survey data versus risk input data).	For MEK: wastewater in impoundment (C23a) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7); concentrations (risk input database - see section A.4.2 and Attachment A8)
Figure B-31. Selenium influent and effluent wastewater concentrations.	For selenium: influent (C24a) and effluent (C24c) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7)
Figure B-32. Selenium influent wastewater concentrations by decharacterization status.	For selenium: influent (C24a) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7); decharacterization status: C6
Figure B-33. Selenium wastewater concentrations in impoundment (survey data versus risk input data).	For selenium: wastewater in impoundment (C23a) concentrations, PQU flags, BDLs (consolidated database - see section A.4.1 and Attachments A6, A7); concentrations (risk input database - see section A.4.2 and Attachment A8)

Table B-2. Characteristics of Industrial Impoundments

Characteristic	Direct Dischargers	Zero Dischargers	Total
Estimates for All Nonhazardous Industrial Impoundments			
Number of facilities	6,575 (384)	884 (178)	7,459 (385)
Number of impoundments (based on screener survey)	15,992 (2,038)	1,705 (240)	17,697 (2,048)
Number of impoundments (based on long survey)	16,701 (1,756)	1,717 (421)	18,417 (1,764)
Estimates for Impoundments with Constituents/pH of Concern			
Number of facilities	3,944 (518)	512 (139)	4,457 (522)
Number of impoundments	10,987 (1,896)	876 (165)	11,863 (1,903)
Total volume of wastewater managed (metric tons)	627,218,336* (334,849,400)	27,250,309* (14,903,337)	654,468,645* (334,824,107)
Number of facilities that manage decharacterized wastes	605 (128)	62* (45)	667 (133)
Number of facilities that manage never characteristic wastes	3,339 (440)	450 (112)	3,789 (441)
Number of impoundments that manage decharacterized wastes	2,167 (454)	140* (115)	2,306 (468)
Number of impoundments that manage never characteristic wastes	8,821 (1,715)	736 (137)	9,557 (1,720)
Quantity (metric tons) of wastewater managed in impoundments that manage decharacterized wastes	481,135,509 (202,260,427)	532,435* (463,972)	481,667,944 (202,257,984)
Quantity (metric tons) of wastewater managed in impoundments that manage never characteristic wastes	156,398,430 (43,847,438)	27,084,601 (12,580,135)	183,483,030 (45,616,418)
Number of facilities with pH of concern pH<3	302* (206)	28* (31)	330* (208)
pH>11	565 (271)	144 (68)	709 (276)
Number of impoundments with pH of concern pH<3	295* (196)	54* (54)	349* (204)
pH>11	758 (352)	164 (67)	921 (358)
Number of facilities that manage any waste exempt or excluded from RCRA regulations	541 (171)	83* (52)	625 (178)
Number of impoundments that manage any waste exempt or excluded from RCRA regulations	1,587 (537)	183* (122)	1,770 (551)
Number of impoundments with state/local permits	9,538 (1,777)	682 (136)	10,220 (1,783)
Number of impoundments that have RFAs conducted	3,761 (1,320)	185* (113)	3,946 (1,325)

Table B-3. Estimated Number of Facilities with Chemicals/pH of Concern by EPA Region

EPA Region	Direct Dischargers	Zero Dischargers	Total
All Facilities	3,944 (348)	512 (116)	4,457 (348)
1	87* (50)	0 (0)	87* (50)
2	100* (66)	83* (49)	183 (76)
3	585 (210)	75* (47)	661 (213)
4	1,705 (390)	103* (55)	1,808 (393)
5	391 (130)	28* (29)	419 (133)
6	434* (233)	89* (51)	524 (237)
7	165* (132)	28* (29)	193* (135)
8	219* (165)	0 (0)	219* (165)
9	114* (58)	46* (37)	159 (68)
10	145* (117)	59* (42)	205* (125)

Table B-4. Estimated Number of Impoundments with Chemicals/pH of Concern by EPA Region

EPA Region	Direct Dischargers	Zero Dischargers	Total
All impoundments	10,987 (1,704)	876 (137)	11,863 (1,706)
1	437* (351)	0 (0)	437* (351)
2	229* (138)	83* (44)	312 (143)
3	1,895* (1,168)	100* (56)	1,995* (1,169)
4	3,975 (991)	128 (63)	4,103 (993)
5	1,064 (329)	56* (56)	1,121 (333)
6	1,900* (1,161)	168* (91)	2,068* (1,165)
7	368* (278)	28* (28)	396* (279)
8	395* (207)	0 (0)	395* (207)
9	418* (228)	184* (140)	601 (268)
10	307* (238)	128* (105)	434* (260)

Table B-5. Estimated Number of Facilities with Chemicals/pH of Concern by 2-Digit Standard Industrial Classification (SIC) Code

2-Digit SIC Code	Direct Dischargers	Zero Dischargers	Total
All Facilities	3,944 (348)	512 (116)	4,457 (348)
20	236* (236)	101* (54)	336* (241)
22	157* (127)	0 (0)	157* (127)
24	243* (122)	0 (0)	243* (122)
26	244 (83)	25* (27)	270 (87)
28	819 (141)	28* (29)	847 (143)
29	263 (86)	62* (44)	325 (95)
30	96* (53)	19* (23)	114* (58)
32	517 (165)	149 (66)	666 (172)
33	401 (127)	27* (28)	429 (130)
34	7* (14)	24* (26)	31* (30)
36	15* (21)	0 (0)	15* (21)
37	0 (0)	50* (39)	50* (39)
49	333* (199)	0 (0)	333* (199)
51	491 (243)	28* (29)	519 (244)
97	122* (122)	0 (0)	122* (122)

Table B-6. Estimated Number of Impoundments with Chemicals/pH of Concern by 2-Digit Standard Industrial Classification (SIC) Code

2-Digit SIC Code	Direct Dischargers	Zero Dischargers	Total
All Impoundments	10,987 (1,704)	876 (137)	11,863 (1,706)
20	708* (708)	267* (153)	974* (724)
22	157* (127)	0 (0)	157* (127)
24	486* (243)	0 (0)	486* (243)
26	1,340 (400)	25* (25)	1,365 (400)
28	2,734 (1,022)	28* (28)	2,762 (1,022)
29	1,230 (252)	130* (106)	1,361 (273)
30	119 (52)	74* (74)	193 (80)
32	1,426* (1,001)	174 (63)	1,600* (1,003)
33	884 (229)	27* (27)	912 (230)
34	7* (13)	47* (47)	54* (48)
36	37* (29)	0 (0)	37* (29)
37	0 (0)	75* (54)	75* (54)
49	419* (220)	0 (0)	419* (220)
51	1,197* (636)	28* (28)	1,225* (637)
97	244* (244)	0 (0)	244* (244)

Table B-7. Estimated Quantity of Wastewater (metric tons) Managed in Impoundments with Chemicals/pH of Concern, by 2-Digit Standard Industrial Classification (SIC) Code

2-Digit SIC Code	Direct Dischargers	Zero Dischargers	Total
All Impoundments	626,495,468 (200,068,968)	26,818,959 (11,992,958)	653,314,426 (200,145,906)
20	13,296,807* (13,296,807)	18,714,576* (11,627,671)	32,011,382* (17,663,742)
22	388,459* (293,594)	0 (0)	388,459* (293,594)
24	10,042,479* (9,372,635)	0 (0)	10,042,479* (9,372,635)
26	426,454,295 (195,842,259)	1,774,657* (1,774,657)	428,228,953 (195,841,439)
28	60,443,443 (24,132,932)	139,799* (139,799)	60,583,241 (24,132,547)
29	36,028,791* (21,167,383)	443,535* (443,535)	36,472,326* (21,166,930)
30	67,914* (61,270)	337,517* (337,517)	405,432* (342,900)
32	619,108* (609,131)	5,118,566* (4,941,102)	5,737,674* (4,940,840)
33	46,970,517* (30,868,752)	86,284* (86,284)	47,056,801* (30,868,586)
34	7,038* (12,912)	48,265* (48,265)	55,303* (48,775)
36	502,008* (661,349)	0 (0)	502,008* (661,349)
37	0 (0)	144,692* (143,530)	144,692* (143,530)
49	4,259,858* (3,851,949)	0 (0)	4,259,858* (3,851,949)
51	27,345,022* (26,311,362)	11,067* (11,067)	27,356,090* (26,311,364)
97	69,729* (69,729)	0 (0)	69,729* (69,729)

Table B-8. Distribution of Ages of Impoundments with Chemicals/pH of Concern in Operation in Year 2000

Age of Impoundment	Direct Dischargers	Zero Dischargers	Total
All Impoundments In Operation in 2000	9,083 (1,751)	849 (137)	9,932 (1,753)
5 years	1,970 (905)	205 (78)	2,175 (908)
15 years	1,371 (414)	100 (49)	1,471 (416)
25 years	3,325 (1,095)	331 (94)	3,656 (1,099)
35 years	1,144 (359)	188* (142)	1,332 (386)
45 years	1,122 (389)	25* (25)	1,147 (389)
55 years	110* (60)	0 (0)	110* (60)
65 years	34* (28)	0 (0)	34* (28)
101 years	7* (13)	0 (0)	7* (13)

Table B-9. Distribution of Lifetimes of Impoundments with Chemicals/pH of Concern that have Permanently Ceased Receiving Wastes

Age Range	Direct Dischargers	Zero Dischargers	Total
All Closed Impoundments	1,630 (533)	25* (25)	1,655 (534)
0-5 years	93* (52)	0 (0)	93* (52)
6-10 years	29* (26)	0 (0)	29* (26)
11-15 years	798* (453)	25* (25)	823* (454)
16-20 years	143* (76)	0 (0)	143* (76)
21-25 years	116 (55)	0 (0)	116 (55)
26-30 years	37* (29)	0 (0)	37* (29)
31-35 years	31* (27)	0 (0)	31* (27)
36-40 years	22* (22)	0 (0)	22* (22)
41-45 years	28* (26)	0 (0)	28* (26)
46-50 years	262* (241)	0 (0)	262* (241)
51-55 years	47* (47)	0 (0)	47* (47)
56-60 years	24* (24)	0 (0)	24* (24)

Table B-10. Estimated Number of Facilities with Chemicals/pH of Concern by Treatment Type

Treatment Type	Direct Dischargers	Zero Dischargers	Total
Aeration	920 (221)	160 (69)	1,081 (226)
Flocculation	239* (232)	0 (0)	239* (232)
Sedimentation	1,780 (278)	217 (80)	1,997 (285)
Filtration	38* (34)	0 (0)	38* (34)
Coagulation	156* (130)	0 (0)	156* (130)
Disinfection	7* (15)	0 (0)	7* (15)
Precipitation	200* (133)	0 (0)	200* (133)
Ion exchange	0 (0)	0 (0)	0 (0)
Adsorption	7* (15)	0 (0)	7* (15)
Chemical oxidation	76* (49)	36* (36)	112* (60)
Nitrification	97* (55)	29* (30)	127 (62)
Denitrification	63* (44)	29* (30)	92* (53)
Carbonaceous biochemical oxygen demand (CBOD) removal	122* (61)	65* (46)	187 (75)
Anaerobic biological treatment process	399* (266)	0 (0)	399* (266)
Aerobic biological treatment process	612 (268)	36* (36)	647 (271)
Facultative treatment process	150 (68)	29* (30)	180 (74)
pH adjustment	795 (307)	0 (0)	795 (307)
Temperature adjustment	449 (182)	0 (0)	449 (182)
Other	498 (181)	26* (29)	525 (183)
No treatment	2,091 (273)	232 (83)	2,323 (280)

Table B-11. Estimated Number of Lined Impoundments with Chemicals/pH of Concern by 2-Digit Standard Industrial Classification (SIC) Code

2-Digit SIC Code	Direct Dischargers	Zero Dischargers	Total
All Impoundments	4,444 (1,148)	403 (126)	4,847 (1,155)
20	708* (708)	110* (78)	818* (712)
22	21* (22)	0 (0)	21* (22)
24	233* (233)	0 (0)	233* (233)
26	544 (229)	0 (0)	544 (229)
28	1,466* (790)	28* (28)	1,494* (791)
29	290 (88)	102* (102)	392 (135)
30	44* (32)	37* (37)	81* (46)
32	0 (0)	25* (25)	25* (25)
33	460 (166)	0 (0)	460 (166)
34	7* (13)	47* (47)	54* (48)
36	37* (29)	0 (0)	37* (29)
37	0 (0)	25* (25)	25* (25)
49	177* (163)	0 (0)	177* (163)
51	214* (214)	28* (28)	242* (216)
97	244* (244)	0 (0)	244* (244)

Table B-12. Frequency of Liner Usage for Impoundments by Age of Impoundment

Year Impoundment Began Receiving Waste	Before 1900	1900-1939	1940-1949	1950-1959	1960-1969	1970-1979	1980-1989	1990-2000	Total
Number of Impoundments	0	114	409	1,213	1,446	4,226	2,073	2,382	11,863
% of Total Impoundments	0	1	3	10	12	36	17	20	100
Impoundments with Liners									
Number of Lined Impoundments	0	79	267	95	356	1,887	631	1,440	4,755
% of Lined Impoundments for Given Year Range	0	68	65	8	25	45	30	60	40
% of Total Lined Impoundments	0	2	6	2	7	40	13	30	100
% of Lined Impoundments with No Liner Failure	0	2	6	2	8	35	13	34	100
% of Lined Impoundments with Liner Failure	0	0	0	1	4	73	17	4	100
Impoundments without Liners									
Number of Unlined Impoundments	0	35	142	1,118	1,090	2,339	1,442	942	7,108
% of Unlined Impoundments for Given Year Range	0	31	35	92	75	55	70	40	60
% of Total Unlined Impoundments	0	0.5	2	16	15	33	20	13	100

Table B-13. Estimated Number of Overtopping Events at Impoundments with Chemicals/pH of Concern by Duration

Duration	Direct Dischargers	Zero Dischargers	Total
All Overtopping Events	2,040 (761)	61* (44)	2,101 (763)
1 Day	932 (428)	61* (44)	992 (430)
2 Days	96* (79)	0 (0)	96* (79)
4 Days	116* (116)	0 (0)	116* (116)
1 Month	4* (9)	0 (0)	4* (9)
2 Months	3* (9)	0 (0)	3* (9)
5 Months	7* (13)	0 (0)	7* (13)
Cannot Be Determined	882* (538)	0 (0)	882* (538)

Table B-14. Estimated Number of People, Residences, Drinking Water Wells, and Schools within Distance Ranges

Distance from Impoundment	Direct Dischargers	Zero Dischargers	Total
Number of people within 0-150m	47,979 (14,524)	3,600 (1,079)	51,579 (14,564)
151-500m	580,127 (162,685)	83,253 (36,390)	663,380 (166,705)
501-1000m	2,938,328 (964,251)	346,050* (184,390)	3,284,378 (981,722)
1001-2000m	12,434,974 (2,899,926)	1,979,202 (946,061)	14,414,175 (3,050,344)
Number of residences within 0-150m	19,687 (5,836)	1,540 (453)	21,227 (5,854)
151-500m	249,429 (72,408)	35,983 (15,495)	285,411 (74,047)
501-1000m	1,202,653 (379,787)	139,182* (69,912)	1,341,834 (386,168)
1001-2000m	5,072,366 (1,135,606)	826,444 (390,984)	5,898,810 (1,201,029)
Number of drinking water wells within 0-150m	567* (317)	321* (200)	888 (379)
151-500m	12,064* (6,342)	1,663* (1,317)	13,728 (6,476)
501-1000m	53,528 (22,575)	2,618* (1,557)	56,146 (22,622)
1001-2000m	195,041 (55,029)	9,944* (5,097)	204,984 (55,165)
Number of schools within 0-150m	0 (N/A)	0 (N/A)	0 (N/A)
151-500m	541* (321)	0 (N/A)	541* (321)
501-1000m	2,146 (1,032)	243* (163)	2,390 (1,044)
1001-2000m	8,116 (2,069)	874 (387)	8,990 (2,104)

Table B-15. Estimated Number of Surface Impoundments with Chemicals/pH of Concern That Had a State or Local Permit for Wastewater, Sludge Management, Groundwater Protection, or Air Emissions by 2-Digit Standard Industrial Classification (SIC) Code

2-Digit SIC	Direct Dischargers	Zero Dischargers	All Impoundments
All Industries	9,159	643	9,802
20 (Food and Kindred Products)	708	267	974
22 (Textile Mill Products)	21	0	21
24 (Lumber and Wood Products)	233	0	233
26 (Paper and Allied Products)	1,222	25	1,247
28 (Chemicals and Allied Products)	2,515	28	2,543
29 (Petroleum and Coal Products)	965	28	993
30 (Rubber and Miscellaneous Plastic Products)	98	37	135
32 (Stone, Clay, and Glass Products)	1,199	103	1,302
33 (Primary Metal Industries)	488	27	516
34 (Fabricated Metal Products)	7	24	31
36 (Electronic and Other Electrical Equipment)	7	0	7
37 (Transportation Equipment)	0	75	75
49 (Electric, Gas, and Sanitary Services)	256	0	256
51 (Wholesale Trade, Nondurable Goods)	1,197	28	1,225
97 (National Security and International Affairs)	244	0	244

Table B-16. Estimated Number of Impoundments in Population B Which Were Solid Waste Management Units at RCRA Treatment, Storage, and Disposal Facilities (TSDs)Evaluated During a RCRA Facility Assessment or Similar Action, by 2-Digit Standard Industrial Classification (SIC) Code

2-Digit SIC	Direct Dischargers	Zero Dischargers	All Impoundments
All Industries	3,288	146	3,433
26 (Paper and Allied Products)	20	0	20
28 (Chemicals and Allied Products)	2,171	0	2,171
29 (Petroleum and Coal Products)	778	68	846
33 (Primary Metal Industries)	240	27	267
37 (Transportation Equipment)	0	50	50
49 (Electric, Gas, and Sanitary Services)	79	0	79

Table B-17. Estimated Number of Impoundments with Chemicals/pH of Concern that Received Any Waste Exempt or Excluded from RCRA Regulations, by 2-Digit Standard Industrial Classification (SIC) Code

2-Digit SIC (Industry)	Direct Dischargers	Zero Dischargers	All Impoundments
All Industries	1,534	173	1,706
22 (Textile Mill Products)	21	0	21
26 (Paper and Allied Products)	641	0	641
28 (Chemicals and Allied Products)	588	0	588
29 (Petroleum and Coal Products)	206	102	308
32 (Stone, Clay, and Glass Products)	0	20	20
33 (Primary Metal Industries)	28	0	28
34 (Fabricated Metal Products)	7	0	7
36 (Electronic and Other Electrical Equipment)	22	0	22
37 (Transportation Equipment)	0	50	50
49 (Electric, Gas, and Sanitary Services)	22	0	22

Table B-18. Estimated Quantity (Metric Tons) of Wastewater Managed in Impoundments with Chemicals/pH of Concern That is Exempt or Excluded from Regulation

Regulation	Direct Dischargers	Zero Dischargers	Total
All Regulations	94,472,856	4,295,692	98,768,548
§260.22 and §3001(f)	0	0	0
§261.3(a)(2)(i)	0	0	0
§261.3(a)(2)(iii)	16,731,865	0	16,731,865
§261.3(a)(2)(iv)	86,328	0	86,328
§261.3(a)(2)(iv)(A)	8,221	0	8,221
§261.3(a)(2)(iv)(B)	0	0	0
§261.3(a)(2)(iv)(C)	95,669	10,098	105,767
§261.3(a)(2)(iv)(D)	1,168,963	6,859	1,175,821
§261.3(a)(2)(iv)(E)	1,845,175	6,859	1,852,033
§261.3(a)(2)(iv)(F)	0	0	0
§261.3(a)(2)(iv)(G)	0	0	0
§261.3(c)(2)(ii)	0	0	0
§261.3(c)(2)(ii)(A)	0	0	0
§261.3(c)(2)(ii)(B)	0	0	0
§261.3(c)(2)(ii)(C)	0	0	0
§261.3(c)(2)(ii)(D)	0	0	0
§261.4(a)	1,000,407	0	1,000,407
§261.4(a)(1)	1,606,185	0	1,606,185
§261.4(a)(2)	13,366,523	0	13,366,523
§261.4(a)(3)	0	0	0
§261.4(a)(4)	0	0	0
§261.4(a)(5)	0	0	0
§261.4(a)(6)	2,016,833	0	2,016,833
§261.4(a)(7)	0	0	0
§261.4(a)(9)	0	0	0
§261.4(b)	0	0	0
§261.4(b)(1)	0	0	0
§261.4(b)(2)	0	0	0
§261.4(b)(3)	0	0	0
§261.4(b)(4) and §3001(b)(3)(A)(i)	7,836,906	0	7,836,906
§261.4(b)(5) and §3001(b)(12)(A)	0	0	0
§261.4(b)(6)	0	0	0
§261.4(b)(7) and §3001(b)(3)(A)(ii)	8,265,414	4,271,877	12,537,291
§261.4(b)(8) and §3001(b)(3)(A)(iii)	0	0	0
§261.4(b)(10)	0	0	0
§268.4 and §3005(j)(11)	0	0	0
§268.5 and §3004(h)	0	0	0
§268.6 and §3004(d)	0	0	0
§3004(h)	0	0	0
Other	40,444,366	0	40,444,366

Table B-19a. Chemicals: Presence and Volume in Wastewater (for Impoundments with Chemicals/pH of Concern)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Barium	5,609	86,867*	4,045,548*	334,235,652*
Zinc	5,537	42,413	44,137,843*	26,175,024*
Copper	4,435	6,690*	232,239	1,197,404*
Nickel	4,332	743,304*	232,559*	709,369*
Lead	4,187	1,288*	81,436*	325,629*
Chromium	3,840	2,340*	72,702*	921,257*
Manganese	2,672	273,073*	17,537,976*	697,272,315*
Arsenic	2,163	1,993*	39,721	335,748*
Selenium	2,101	1,395*	30,767*	1,039,495*
Mercury	1,943	138*	10,977*	15,523*
Toluene	1,933	190*	6,450*	6,348*
Fluoride	1,640	881,320*	655,872,641*	709,804,880*
Xylenes, mixed isomers [Xyenes]	1,591	35*	4,672*	3,294*
Chloroform [Trichloromethane]	1,570	3,000*	149,528*	80,860*
Phenol	1,434	2,505*	449,842*	2,539,884*
Cadmium	1,325	125*	5,756*	10,984*
Ethyl benzene	1,176*	11*	4,965*	3,207*
Benzene	1,108*	51*	4,164*	2,262*
Vanadium	1,086	5,519*	32,666*	25,233*
Molybdenum	1,062	471*	19,499*	35,317*
Acetone [2-Propanone]	1,047*	385,119*	48,558,027*	24,103,457*
Carbon disulfide	1,023*	130*	14,416*	939,914*
Sulfide	915	62,403*	7,273,444*	5,472,858*
Antimony	907	47*	2,530*	2,450*
Methyl ethyl ketone [2-Butanone][MEK]	903	25,812*	1,554,826*	11,445,363*
Naphthalene	884*	267*	7,890*	1,594,276*

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19a. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Methanol [methyl alcohol]	807	6,147,194*	636,494,373	3,994,144,150*
Silver	748	72*	2,749*	2,658*
Chromium VI [Hexavalent Chromium]	745	40*	5,559*	9,790*
Beryllium	722	101*	618*	1,158*
Ethylene glycol	710*	23,303*	9,488,441*	17,246*
Cyanide	653	377*	173,996*	91,663*
Formaldehyde	626*	479*	3,739,508*	1,604,584*
Acetaldehyde [Ethanal]	621*	14,858*	5,854,234*	237,461*
Cresols	535*	437*	65,631*	2,908,262*
2,4,5-Trichlorophenol	484*	16*	0	0
Methylene chloride [Dichloromethane]	481*	254*	6,348*	9,658*
Cobalt	470	18*	868*	945*
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]	451*	16*	9*	6,193*
Methyl isobutyl ketone [Hexone] [4-Methyl-2-pentanone] [MIBK]	392*	0	0	0
Bromodichloromethane [Dichlorobromomethane]	379*	1,823*	169*	28,669*
Chloromethane [Methyl chloride]	373*	209*	17,009*	4,459*
Formic Acid	360*	0	8,804,297*	1,580*
Bromoform [Tribromomethane]	336*	29,772*	301*	468,223*
Thallium	309*	5*	1,931*	1,693*
Chlorodibromomethane [Dibromochloromethane]	291*	9,464*	54*	148,767*
n-Dioctyl phthalate	280*	7*	0	302*
Chloroethane [Ethyl chloride]	253*	29*	0	456*
o-Xylene	252*	5*	427*	427*
Bromomethane [Methyl bromide]	232*	664*	0	10,430*
Carbon tetrachloride	232*	13*	0	203*

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19a. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Heptachlor epoxide, alpha, beta, and gamma isomers	230*	0*	49*	31*
p-Cresol [4-Methyl phenol]	229*	16*	150*	276*
Benzyl alcohol	207*	473*	87,068*	41,424*
Pyrene	194	8*	1,259*	2*
Aniline	190*	699*	75,635*	64,560*
2,4,6-Trichlorophenol	188*	16*	0	0
Methyl tert-butyl ether [MTBE]	187*	412*	0	0*
o-Cresol [2-Methyl phenol]	184*	16*	86*	0
Tetrachlorodibenzofurans [TCDFs]	182*	0*	1*	4*
m-Cresol [3-Methyl phenol]	159*	16*	0	0
Methoxychlor	156*	5*	222*	0
Tetrachloroethylene [Perchloroethylene]	152*	2*	53*	53*
1,4-Dichlorobenzene [p-Dichlorobenzene]	143*	16*	0	0
Cyanide, amenable	142*	14*	8,514*	1,776*
2,4-D [2,4-Dichlorophenoxyacetic acid]	136*	2*	0	0
2,4-Dinitrotoluene	136*	16*	0	0
Chlordane, alpha & gamma isomers	136*	1*	0	0
Endrin	136*	0*	0	0
Heptachlor	136*	0*	0	0
Lindane [gamma-Hexachlorocyclohexane] [gamma-BHC]	136*	0*	0	0
Silvex [2,4,5-Trichlorophenoxypropionic acid]	136*	0*	0	0
Toxaphene [Chlorinated camphene]	136*	8*	0	0
Chrysene	136	10*	197*	12*

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19a. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Styrene	129*	52*	69,572*	28,460*
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]	121*	0	0*	0*
alpha-Hexachlorocyclohexane [alpha-BHC]	115*	1*	106*	49*
Di-n-butyl phthalate	114*	0	0*	0
Acenaphthene	106*	0	109*	0
Benzo(a)pyrene	103*	0*	102*	1*
Fluoranthene	100*	0*	178*	9*
Tetrachlorodibenzo-p-dioxins [TCDDs]	91*	0	0	0
Benzo[a]anthracene	85*	0*	23*	2*
Anthracene	85*	0	28*	0
Fluorene	66*	0	41*	5*
1,1-Dichloroethylene [Vinylidene chloride]	57*	0*	79*	79*
Polychlorinated biphenyls [Aroclors]	55*	1*	2,907*	6,061*
N,N-Dimethyl formamide [DMF]	52*	0	0	0
2,4-Dichlorophenol	52*	0	0	0
2-Chlorophenol [o-Chlorophenol]	52*	0	0	0
Hexachlorodibenzofurans [HxCDFs]	51*	0*	0*	0*
1,2-Dichloropropane [Propylene dichloride]	50*	18*	20,848*	10,039*
1,2-Dichloroethane [Ethylene dichloride]	49*	0*	332*	21*
Ethylene thiourea	46*	0	0	0
Thiram [Thiuram]	46*	0	0	0
N-Nitrosodiphenylamine [Diphenylnitrosamine]	46*	0	0	0
Cumene [Isopropyl benzene]	44*	0	0	0

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19a. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
n-Hexane	44*	0	0	0
Acrylonitrile	43*	3*	1,360*	1,380*
1,1,1-Trichloroethane [Methyl chloroform]	43*	3*	0*	0
Epichlorohydrin [1-Chloro-2,3-epoxypropane]	42*	0	0	0
2,4-Dimethylphenol	42*	14*	3,487*	379*
Hexachlorodibenzo-p-dioxins [HxCDDs]	41*	0	0	0*
Pentachlorodibenzofurans [PeCDFs]	41*	0	0	0*
1,4-Dioxane [1,4-Diethyleneoxide]	40*	107*	32,468*	4,811*
Benzo(b)fluoranthene	40*	0*	34*	1*
Bis(2-chloroisopropyl) ether [2,2 -Dichloroisopropyl ether]	36*	53*	46,503*	29,530*
Cyclohexanone	35*	88*	20,485*	5,051*
Pentachlorophenol [PCP]	35*	0	0	9*
Indeno(1,2,3-cd) pyrene	33*	0	25*	2*
Acrolein [2-propenal]	32*	18*	0	0
Allyl alcohol	31*	5,128*	1,636,554*	471,788*
Dibenz[a,h]anthracene	29*	0	10*	1*
Ethylidene dichloride [1,1-Dichloroethane]	29*	1*	0	0
Pyridine	24*	0	191*	0
Chlorobenzene	22*	0	0*	0
Diethyl phthalate [DEP]	22*	0	3*	0
Vinyl acetate	22*	0	0	0
Chloroprene [2-Chloro-1,3-butadiene]	22*	0	0	0
1,2,4-Trichlorobenzene	21*	0	1*	0
m-Xylene	21*	0*	123*	123*
p-Xylene	21*	0*	123*	123*

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19a. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Ethyl acetate	16*	0	187,466*	0
Ethyl ether [Diethyl ether]	16*	0	898*	0
Methyl methacrylate	15*	242*	124,055*	17,782*
Ethylene dibromide [1,2-Dibromoethane]	15*	0	0	0
1,2-Dichlorobenzene [o-Dichlorobenzene]	15*	0	0	0
Trichloroethylene [TCE]	15*	2*	0	0
1,1,2-Trichloroethane [Vinyl trichloride]	14*	0	0*	0
2,6-Dinitrotoluene	14*	0	0	1,034*
Allyl chloride	14*	100*	46,234*	9,484*
Bis(2-chloroethyl) ether [sym-Dichloroethyl ether]	14*	0	0	54*
Triethylamine	14*	0	0	0
Vinyl chloride [chloroethylene]	14*	0	0*	0
2,3,4,6-Tetrachlorophenol	14*	0	0	0
n-Butyl alcohol [n-Butanol]	11*	0	388,258*	247*
Hexachlorobenzene	11*	0	0	0
2,4-Dinitrophenol	8*	0	0	0
Dimethyl phthalate [DMP]	8*	0	0	0
Acrylic acid [propenoic acid]	8*	3*	769,840*	2,307*
Acetonitrile [Methyl cyanide]	7*	0	0	0
beta-Hexachlorocyclohexane [beta-BHC]	7*	3*	168*	168*
Ethylene oxide	6*	76*	42,880*	58*
Furfural	5*	0	7,266*	0
Propylene oxide [1,2-Epoxypropane]	4*	30*	11,052*	0
Cyclohexanol	1*	0	0	0
Isobutyl alcohol [Isobutanol]	1*	0	0	0

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19a. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
1,1,1,2-Tetrachloroethane	Not Present or Not Reported	0	0	0
1,1,2,2-Tetrachloroethane	Not Present or Not Reported	0	0	0
1,1,2-Trichloro-1,2,2-trifluoroethane [Freon 113]	Not Present or Not Reported	0	0	0
1,2,3-Trichloropropane	Not Present or Not Reported	0	0	0
1,2,4,5-Tetrachlorobenzene	Not Present or Not Reported	0	0	0
1,2-Dibromo-3-chloropropane	Not Present or Not Reported	0	0	0
1,2-Diphenylhydrazine	Not Present or Not Reported	0	0	0
1,2-Epoxybutane [1,2-Butylene oxide]	Not Present or Not Reported	0	0	0
1,3,5-Trinitrobenzene [sym-Trinitrobenzene]	Not Present or Not Reported	0	0	0
1,3-Butadiene	Not Present or Not Reported	0	0	0
1,3-Dinitrobenzene [m-Dinitrobenzene]	Not Present or Not Reported	0	0	0
1,3-Phenylenediamine [m-Phenylenediamine]	Not Present or Not Reported	0	0	0
2,4,5-Trichlorophenoxyacetic acid [2,4,5,-T]	Not Present or Not Reported	0	0	0
2,4-Toluenediamine [2,4-Diaminotoluene]	Not Present or Not Reported	0	0	0
2-Chloronaphthalene [beta-Chloronaphthalene]	Not Present or Not Reported	0	0	0
2-Ethoxyethanol [Ethylene glycol monoethyl ether]	Not Present or Not Reported	0	0	0
2-Ethoxyethanol acetate [2-EEA]	Not Present or Not Reported	0	0	0
2-Methoxyethanol [methyl cellosolve]	Not Present or Not Reported	0	0	0

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19a. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
2-Methoxyethanol acetate [2-MEA] [methyl cellosolve acetate]	Not Present or Not Reported	0	0	0
2-Nitropropane	Not Present or Not Reported	0	0	0
3,3 -Dichlorobenzidine	Not Present or Not Reported	0	0	0
3,3 -Dimethoxybenzidine	Not Present or Not Reported	0	0	0
3,3 -Dimethylbenzidine	Not Present or Not Reported	0	0	0
3,4-Dimethylphenol	Not Present or Not Reported	0	0	0
3-Methylcholanthrene	Not Present or Not Reported	0	0	0
4,4 -Methylene bis(2-chloroaniline)	Not Present or Not Reported	0	0	0
4-Chloroaniline [p-aminochlorobenzene]	Not Present or Not Reported	0	0	0
7,12-Dimethylbenz[a]anthracene	Not Present or Not Reported	0	0	0
Acetophenone	Not Present or Not Reported	0	0	0
Acrylamide	Not Present or Not Reported	0	0	0
Aldicarb	Not Present or Not Reported	0	0	0
Aldrin	Not Present or Not Reported	0	0	0
Ammonium vanadate	Not Present or Not Reported	0	0	0
Amonium perchlorate	Not Present or Not Reported	0	0	0
Aramite	Not Present or Not Reported	0	0	0
Benzidine	Not Present or Not Reported	0	0	0

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19a. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Benzyl chloride	Not Present or Not Reported	0	0	0
Bis(chloromethyl) ether [sym-Dichloromethyl ether]	Not Present or Not Reported	0	0	0
Butyl benzyl phthalate	Not Present or Not Reported	0	0	0
Chloral [Trichloroacetaldehyde]	Not Present or Not Reported	0	0	0
Chloral hydrate [Trichloroacetaldehyde hydrate]	Not Present or Not Reported	0	0	0
Chlorobenzilate	Not Present or Not Reported	0	0	0
Chloromethyl Methyl Ether	Not Present or Not Reported	0	0	0
cis-1,2-Dichloroethylene	Not Present or Not Reported	0	0	0
cis-1,3-Dichloropropylene	Not Present or Not Reported	0	0	0
Cyanogen bromide [Bromine cyanide]	Not Present or Not Reported	0	0	0
Cyanogen chloride [Chlorine cyanide]	Not Present or Not Reported	0	0	0
Diallate	Not Present or Not Reported	0	0	0
Dichlorodifluoromethane [CFC-12]	Not Present or Not Reported	0	0	0
Dieldrin	Not Present or Not Reported	0	0	0
Diethylstilbestrol [DES]	Not Present or Not Reported	0	0	0
Dimethoate	Not Present or Not Reported	0	0	0
Dinoseb [2-sec-Butyl-4,6-dinitrophenol]	Not Present or Not Reported	0	0	0
Diphenylamine	Not Present or Not Reported	0	0	0

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19a. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Direct Black 38	Not Present or Not Reported	0	0	0
Direct Blue 6	Not Present or Not Reported	0	0	0
Direct Brown 95	Not Present or Not Reported	0	0	0
Disulfoton	Not Present or Not Reported	0	0	0
Endosulfan	Not Present or Not Reported	0	0	0
Endothall	Not Present or Not Reported	0	0	0
Ethyl methacrylate	Not Present or Not Reported	0	0	0
Ethyl methanesulfonate	Not Present or Not Reported	0	0	0
Furan	Not Present or Not Reported	0	0	0
Glycidylaldehyde	Not Present or Not Reported	0	0	0
Hexachloro-1,3-butadiene [Hexachlorobutadiene]	Not Present or Not Reported	0	0	0
Hexachlorocyclopentadiene	Not Present or Not Reported	0	0	0
Hexachloroethane	Not Present or Not Reported	0	0	0
Hexachlorophene	Not Present or Not Reported	0	0	0
Hydrazine	Not Present or Not Reported	0	0	0
Isophorone	Not Present or Not Reported	0	0	0
Kepone	Not Present or Not Reported	0	0	0
Maleic anhydride	Not Present or Not Reported	0	0	0

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19a. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Maleic hydrazide	Not Present or Not Reported	0	0	0
Methacrylonitrile	Not Present or Not Reported	0	0	0
Methomyl	Not Present or Not Reported	0	0	0
Methyl parathion	Not Present or Not Reported	0	0	0
Methylene bromide [Dibromomethane]	Not Present or Not Reported	0	0	0
Nickel Subsulfide	Not Present or Not Reported	0	0	0
Nitrobenzene	Not Present or Not Reported	0	0	0
N-Nitrosodiethylamine	Not Present or Not Reported	0	0	0
N-Nitrosodimethylamine	Not Present or Not Reported	0	0	0
N-Nitrosodi-n-butylamine	Not Present or Not Reported	0	0	0
N-Nitrosodi-n-propylamine [Di-n-propylnitrosamine]	Not Present or Not Reported	0	0	0
N-Nitroso-N-methylethylamine	Not Present or Not Reported	0	0	0
N-Nitrosopiperidine	Not Present or Not Reported	0	0	0
N-Nitrosopyrrolidine	Not Present or Not Reported	0	0	0
Octamethylpyrophosphoramide	Not Present or Not Reported	0	0	0
o-Toluidine	Not Present or Not Reported	0	0	0
p,p -DDD	Not Present or Not Reported	0	0	0
p,p -DDE	Not Present or Not Reported	0	0	0

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19a. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
p,p -DDT	Not Present or Not Reported	0	0	0
Parathion	Not Present or Not Reported	0	0	0
Pentachlorobenzene	Not Present or Not Reported	0	0	0
Pentachlorodibenzo-p-dioxins [PeCDDs]	Not Present or Not Reported	0	0	0
Pentachloronitrobenzene [PCNB] [Quintobenzene] [Quintozene]	Not Present or Not Reported	0	0	0
Perchlorate	Not Present or Not Reported	0	0	0
Phorate	Not Present or Not Reported	0	0	0
Phthalic anhydride	Not Present or Not Reported	0	0	0
Pronamide	Not Present or Not Reported	0	0	0
p-Toluidine	Not Present or Not Reported	0	0	0
Safrole	Not Present or Not Reported	0	0	0
Strychnine	Not Present or Not Reported	0	0	0
Styrene oxide	Not Present or Not Reported	0	0	0
Tetraethyldithiopyrophosphate [Sulfotepp]	Not Present or Not Reported	0	0	0
trans-1,2-Dichloroethylene	Not Present or Not Reported	0	0	0
trans-1,3-Dichloropropylene	Not Present or Not Reported	0	0	0
Trichlorofluoromethane [Trichloromonofluoromethane] [CFC-11]	Not Present or Not Reported	0	0	0
Tris(2,3-dibromopropyl) phosphate	Not Present or Not Reported	0	0	0
Warfarin	Not Present or Not Reported	0	0	0

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19b. Standard Errors for Chemicals: Presence and Volume in Wastewater (For Impoundments with Chemicals/pH of Concern)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Barium	1,616	92,570*	3,359,085*	601,022,558*
Zinc	1,319	19,623	69,191,620*	41,154,732*
Copper	1,029	4,694*	98,639	1,758,524*
Nickel	1,360	735,781*	137,148*	954,657*
Lead	1,218	1,161*	68,854*	472,479*
Chromium	905	1,468*	42,265*	1,474,002*
Manganese	736	198,223*	9,291,106*	1,217,759,748*
Arsenic	692	1,087*	19,008	458,257*
Selenium	989	1,485*	18,329*	1,805,473*
Mercury	704	126*	10,071*	14,620*
Toluene	869	293*	8,252*	8,050*
Fluoride	535	932,880*	652,297,404*	645,992,631*
Xylenes, mixed isomers [Xyenes]	776	22*	6,637*	5,440*
Chloroform [Trichloromethane]	620	2,376*	120,208*	63,104*
Phenol	330	1,945*	305,642*	4,323,561*
Cadmium	361	90*	4,270*	8,405*
Ethyl benzene	665*	7*	4,228*	4,204*
Benzene	665*	71*	3,496*	2,205*
Vanadium	433	5,016*	32,051*	30,889*
Molybdenum	373	306*	13,414*	18,996*
Acetone [2-Propanone]	601*	511,381*	64,548,719*	40,066,547*
Carbon disulfide	678*	140*	17,303*	2,306,653*
Sulfide	381	94,198*	7,911,353*	5,481,577*
Antimony	333	31*	2,745*	2,405*
Methyl ethyl ketone [2-Butanone][MEK]	398	23,992*	1,130,593*	18,400,064*
Naphthalene	647*	448*	6,804*	2,893,890*

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19b. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Methanol [methyl alcohol]	362	5,208,393*	289,572,696	6,024,051,004*
Silver	289	50*	2,408*	2,392*
Chromium VI [Hexavalent Chromium]	317	22*	3,947*	9,878*
Beryllium	291	84*	585*	779*
Ethylene glycol	373*	22,348*	27,583,115*	23,388*
Cyanide	239	473*	191,511*	108,534*
Formaldehyde	359*	584*	8,209,467*	1,451,442*
Acetaldehyde [Ethanal]	357*	14,707*	5,117,810*	210,533*
Cresols	356*	404*	58,808*	4,970,921*
2,4,5-Trichlorophenol	374*	16*	N/A	N/A
Methylene chloride [Dichloromethane]	244*	184*	7,566*	9,224*
Cobalt	233	16*	1,407*	1,415*
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]	260*	12*	8*	9,681*
Methyl isobutyl ketone [Hexone] [4-Methyl-2-pentanone] [MIBK]	350*	N/A	N/A	N/A
Bromodichloromethane [Dichlorobromomethane]	234*	1,822*	206*	28,633*
Chloromethane [Methyl chloride]	234*	180*	28,116*	3,056*
Formic Acid	275*	N/A	10,828,275*	4,442*
Bromoform [Tribromomethane]	242*	29,770*	284*	467,897*
Thallium	203*	5*	3,488*	3,020*
Chlorodibromomethane [Dibromochloromethane]	234*	9,464*	40*	148,750*
n-Dioctyl phthalate	236*	9*	N/A	796*
Chloroethane [Ethyl chloride]	233*	29*	N/A	450*
o-Xylene	232*	4*	715*	715*
Bromomethane [Methyl bromide]	232*	664*	N/A	10,430*

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19b. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Carbon tetrachloride	232*	13*	N/A	203*
Heptachlor epoxide, alpha, beta, and gamma isomers	166*	0.08*	56*	52*
p-Cresol [4-Methyl phenol]	145*	16*	508*	277*
Benzyl alcohol	154*	468*	84,668*	49,993*
Pyrene	72	7*	1,677*	3*
Aniline	136*	699*	75,635*	64,560*
2,4,6-Trichlorophenol	142*	16*	N/A	N/A
Methyl tert-butyl ether [MTBE]	106*	412*	N/A	0.4*
o-Cresol [2-Methyl phenol]	139*	16*	290*	N/A
Tetrachlorodibenzofurans [TCDFs]	95*	0.000*	1*	6*
m-Cresol [3-Methyl phenol]	137*	16*	N/A	N/A
Methoxychlor	137*	5*	326*	N/A
Tetrachloroethylene [Perchloroethylene]	137*	2*	53*	53*
1,4-Dichlorobenzene [p-Dichlorobenzene]	136*	16*	N/A	N/A
Cyanide, amenable	106*	57*	36,182*	3,700*
2,4-D [2,4-Dichlorophenoxyacetic acid]	136*	2*	N/A	N/A
2,4-Dinitrotoluene	136*	16*	N/A	N/A
Chlordane, alpha & gamma isomers	136*	0.8*	N/A	N/A
Endrin	136*	0.2*	N/A	N/A
Heptachlor	136*	0.08*	N/A	N/A
Lindane [gamma-Hexachlorocyclohexane] [gamma-BHC]	136*	0.08*	N/A	N/A
Silvex [2,4,5-Trichlorophenoxypropionic acid]	136*	0.2*	N/A	N/A
Toxaphene [Chlorinated camphene]	136*	8*	N/A	N/A

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19b. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Chrysene	67	10*	148*	14*
Styrene	66*	74*	80,509*	50,226*
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]	82*	N/A	0.002*	0.002*
alpha-Hexachlorocyclohexane [alpha-BHC]	115*	0.8*	106*	81*
Di-n-butyl phthalate	67*	N/A	0.04*	N/A
Acenaphthene	54*	N/A	516*	N/A
Benzo(a)pyrene	55*	0.02*	83*	2*
Fluoranthene	53*	0.09*	352*	14*
Tetrachlorodibenzo-p-dioxins [TCDDs]	55*	N/A	N/A	N/A
Benzo[a]anthracene	51*	0.08*	37*	2*
Anthracene	50*	N/A	55*	N/A
Fluorene	39*	N/A	42*	10*
1,1-Dichloroethylene [Vinylidene chloride]	57*	0.3*	79*	79*
Polychlorinated biphenyls [Aroclors]	39*	1*	3,767*	6,545*
N,N-Dimethyl formamide [DMF]	41*	N/A	N/A	N/A
2,4-Dichlorophenol	41*	N/A	N/A	N/A
2-Chlorophenol [o-Chlorophenol]	41*	N/A	N/A	N/A
Hexachlorodibenzofurans [HxCDFs]	42*	0.000*	0.02*	0.002*
1,2-Dichloropropane [Propylene dichloride]	38*	24*	23,714*	16,607*
1,2-Dichloroethane [Ethylene dichloride]	34*	0.1*	1,082*	54*
Ethylene thiourea	46*	N/A	N/A	N/A
Thiram [Thiuram]	46*	N/A	N/A	N/A
N-Nitrosodiphenylamine [Diphenylnitrosamine]	46*	N/A	N/A	N/A

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19b. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Cumene [Isopropyl benzene]	33*	N/A	N/A	N/A
n-Hexane	33*	N/A	N/A	N/A
Acrylonitrile	36*	4*	1,758*	2,439*
1,1,1-Trichloroethane [Methyl chloroform]	31*	3*	0.3*	N/A
Epichlorohydrin [1-Chloro-2,3-epoxypropane]	31*	N/A	N/A	N/A
2,4-Dimethylphenol	31*	24*	8,145*	659*
Hexachlorodibenzo-p-dioxins [HxCDDs]	41*	N/A	N/A	0.001*
Pentachlorodibenzofurans [PeCDFs]	41*	N/A	N/A	0.000*
1,4-Dioxane [1,4-Diethyleneoxide]	38*	362*	109,950*	16,292*
Benzo(b)fluoranthene	30*	0.008*	57*	2*
Bis(2-chloroisopropyl) ether [2,2 -Dichloroisopropyl ether]	36*	76*	48,605*	51,713*
Cyclohexanone	34*	128*	73,865*	6,622*
Pentachlorophenol [PCP]	28*	N/A	N/A	9*
Indeno(1,2,3-cd) pyrene	27*	N/A	39*	3*
Acrolein [2-propenal]	27*	32*	N/A	N/A
Allyl alcohol	27*	9,203*	2,041,911*	843,892*
Dibenz[a,h]anthracene	26*	N/A	19*	2*
Ethylidene dichloride [1,1-Dichloroethane]	26*	0.9*	N/A	N/A
Pyridine	24*	N/A	646*	N/A
Chlorobenzene	22*	N/A	0.02*	N/A
Diethyl phthalate [DEP]	22*	N/A	4*	N/A
Vinyl acetate	22*	N/A	N/A	N/A
Chloroprene [2-Chloro-1,3-butadiene]	22*	N/A	N/A	N/A
1,2,4-Trichlorobenzene	22*	N/A	2*	N/A
m-Xylene	22*	0.4*	206*	206*

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19b. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
p-Xylene	22*	0.4*	206*	206*
Ethyl acetate	19*	N/A	635,951*	N/A
Ethyl ether [Diethyl ether]	19*	N/A	3,045*	N/A
Methyl methacrylate	19*	314*	282,462*	31,885*
Ethylene dibromide [1,2-Dibromoethane]	19*	N/A	N/A	N/A
1,2-Dichlorobenzene [o-Dichlorobenzene]	18*	N/A	N/A	N/A
Trichloroethylene [TCE]	18*	4*	N/A	N/A
1,1,2-Trichloroethane [Vinyl trichloride]	18*	N/A	0.05*	N/A
2,6-Dinitrotoluene	18*	N/A	N/A	1,336*
Allyl chloride	18*	180*	68,044*	17,005*
Bis(2-chloroethyl) ether [sym-Dichloroethyl ether]	18*	N/A	N/A	70*
Triethylamine	18*	N/A	N/A	N/A
Vinyl chloride [chloroethylene]	18*	N/A	0.2*	N/A
2,3,4,6-Tetrachlorophenol	18*	N/A	N/A	N/A
n-Butyl alcohol [n-Butanol]	16*	N/A	1,195,884*	839*
Hexachlorobenzene	16*	N/A	N/A	N/A
2,4-Dinitrophenol	13*	N/A	N/A	N/A
Dimethyl phthalate [DMP]	13*	N/A	N/A	N/A
Acrylic acid [propenoic acid]	13*	8*	2,612,547*	7,832*
Acetonitrile [Methyl cyanide]	13*	N/A	N/A	N/A
beta-Hexachlorocyclohexane [beta-BHC]	12*	6*	310*	310*
Ethylene oxide	11*	192*	87,103*	197*
Furfural	11*	N/A	25,588*	N/A
Propylene oxide [1,2-Epoxypropane]	9*	77*	28,031*	N/A
Cyclohexanol	5*	N/A	N/A	N/A

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19b. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Isobutyl alcohol [Isobutanol]	5*	N/A	N/A	N/A
1,1,1,2-Tetrachloroethane	Not Present or Not Reported	N/A	N/A	N/A
1,1,2,2-Tetrachloroethane	Not Present or Not Reported	N/A	N/A	N/A
1,1,2-Trichloro-1,2,2-trifluoroethane [Freon 113]	Not Present or Not Reported	N/A	N/A	N/A
1,2,3-Trichloropropane	Not Present or Not Reported	N/A	N/A	N/A
1,2,4,5-Tetrachlorobenzene	Not Present or Not Reported	N/A	N/A	N/A
1,2-Dibromo-3-chloropropane	Not Present or Not Reported	N/A	N/A	N/A
1,2-Diphenylhydrazine	Not Present or Not Reported	N/A	N/A	N/A
1,2-Epoxybutane [1,2-Butylene oxide]	Not Present or Not Reported	N/A	N/A	N/A
1,3,5-Trinitrobenzene [sym-Trinitrobenzene]	Not Present or Not Reported	N/A	N/A	N/A
1,3-Butadiene	Not Present or Not Reported	N/A	N/A	N/A
1,3-Dinitrobenzene [m-Dinitrobenzene]	Not Present or Not Reported	N/A	N/A	N/A
1,3-Phenylenediamine [m-Phenylenediamine]	Not Present or Not Reported	N/A	N/A	N/A
2,4,5-Trichlorophenoxyacetic acid [2,4,5,-T]	Not Present or Not Reported	N/A	N/A	N/A
2,4-Toluenediamine [2,4-Diaminotoluene]	Not Present or Not Reported	N/A	N/A	N/A
2-Chloronaphthalene [beta-Chloronaphthalene]	Not Present or Not Reported	N/A	N/A	N/A
2-Ethoxyethanol [Ethylene glycol monoethyl ether]	Not Present or Not Reported	N/A	N/A	N/A
2-Ethoxyethanol acetate [2-EEA]	Not Present or Not Reported	N/A	N/A	N/A

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19b. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
2-Methoxyethanol [methyl cellosolve]	Not Present or Not Reported	N/A	N/A	N/A
2-Methoxyethanol acetate [2-MEA] [methyl cellosolve acetate]	Not Present or Not Reported	N/A	N/A	N/A
2-Nitropropane	Not Present or Not Reported	N/A	N/A	N/A
3,3 -Dichlorobenzidine	Not Present or Not Reported	N/A	N/A	N/A
3,3 -Dimethoxybenzidine	Not Present or Not Reported	N/A	N/A	N/A
3,3 -Dimethylbenzidine	Not Present or Not Reported	N/A	N/A	N/A
3,4-Dimethylphenol	Not Present or Not Reported	N/A	N/A	N/A
3-Methylcholanthrene	Not Present or Not Reported	N/A	N/A	N/A
4,4 -Methylene bis(2-chloroaniline)	Not Present or Not Reported	N/A	N/A	N/A
4-Chloroaniline [p-aminochlorobenzene]	Not Present or Not Reported	N/A	N/A	N/A
7,12-Dimethylbenz[a]anthracene	Not Present or Not Reported	N/A	N/A	N/A
Acetophenone	Not Present or Not Reported	N/A	N/A	N/A
Acrylamide	Not Present or Not Reported	N/A	N/A	N/A
Aldicarb	Not Present or Not Reported	N/A	N/A	N/A
Aldrin	Not Present or Not Reported	N/A	N/A	N/A
Ammonium vanadate	Not Present or Not Reported	N/A	N/A	N/A
Amonium perchlorate	Not Present or Not Reported	N/A	N/A	N/A
Aramite	Not Present or Not Reported	N/A	N/A	N/A

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19b. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Benzidine	Not Present or Not Reported	N/A	N/A	N/A
Benzyl chloride	Not Present or Not Reported	N/A	N/A	N/A
Bis(chloromethyl) ether [sym-Dichloromethyl ether]	Not Present or Not Reported	N/A	N/A	N/A
Butyl benzyl phthalate	Not Present or Not Reported	N/A	N/A	N/A
Chloral [Trichloroacetaldehyde]	Not Present or Not Reported	N/A	N/A	N/A
Chloral hydrate [Trichloroacetaldehyde hydrate]	Not Present or Not Reported	N/A	N/A	N/A
Chlorobenzilate	Not Present or Not Reported	N/A	N/A	N/A
Chloromethyl Methyl Ether	Not Present or Not Reported	N/A	N/A	N/A
cis-1,2-Dichloroethylene	Not Present or Not Reported	N/A	N/A	N/A
cis-1,3-Dichloropropylene	Not Present or Not Reported	N/A	N/A	N/A
Cyanogen bromide [Bromine cyanide]	Not Present or Not Reported	N/A	N/A	N/A
Cyanogen chloride [Chlorine cyanide]	Not Present or Not Reported	N/A	N/A	N/A
Diallate	Not Present or Not Reported	N/A	N/A	N/A
Dichlorodifluoromethane [CFC-12]	Not Present or Not Reported	N/A	N/A	N/A
Dieldrin	Not Present or Not Reported	N/A	N/A	N/A
Diethylstilbestrol [DES]	Not Present or Not Reported	N/A	N/A	N/A
Dimethoate	Not Present or Not Reported	N/A	N/A	N/A
Dinoseb [2-sec-Butyl-4,6-dinitrophenol]	Not Present or Not Reported	N/A	N/A	N/A

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19b. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Diphenylamine	Not Present or Not Reported	N/A	N/A	N/A
Direct Black 38	Not Present or Not Reported	N/A	N/A	N/A
Direct Blue 6	Not Present or Not Reported	N/A	N/A	N/A
Direct Brown 95	Not Present or Not Reported	N/A	N/A	N/A
Disulfoton	Not Present or Not Reported	N/A	N/A	N/A
Endosulfan	Not Present or Not Reported	N/A	N/A	N/A
Endothall	Not Present or Not Reported	N/A	N/A	N/A
Ethyl methacrylate	Not Present or Not Reported	N/A	N/A	N/A
Ethyl methanesulfonate	Not Present or Not Reported	N/A	N/A	N/A
Furan	Not Present or Not Reported	N/A	N/A	N/A
Glycidylaldehyde	Not Present or Not Reported	N/A	N/A	N/A
Hexachloro-1,3-butadiene [Hexachlorobutadiene]	Not Present or Not Reported	N/A	N/A	N/A
Hexachlorocyclopentadiene	Not Present or Not Reported	N/A	N/A	N/A
Hexachloroethane	Not Present or Not Reported	N/A	N/A	N/A
Hexachlorophene	Not Present or Not Reported	N/A	N/A	N/A
Hydrazine	Not Present or Not Reported	N/A	N/A	N/A
Isophorone	Not Present or Not Reported	N/A	N/A	N/A
Kepone	Not Present or Not Reported	N/A	N/A	N/A

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19b. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Maleic anhydride	Not Present or Not Reported	N/A	N/A	N/A
Maleic hydrazide	Not Present or Not Reported	N/A	N/A	N/A
Methacrylonitrile	Not Present or Not Reported	N/A	N/A	N/A
Methomyl	Not Present or Not Reported	N/A	N/A	N/A
Methyl parathion	Not Present or Not Reported	N/A	N/A	N/A
Methylene bromide [Dibromomethane]	Not Present or Not Reported	N/A	N/A	N/A
Nickel Subsulfide	Not Present or Not Reported	N/A	N/A	N/A
Nitrobenzene	Not Present or Not Reported	N/A	N/A	N/A
N-Nitrosodiethylamine	Not Present or Not Reported	N/A	N/A	N/A
N-Nitrosodimethylamine	Not Present or Not Reported	N/A	N/A	N/A
N-Nitrosodi-n-butylamine	Not Present or Not Reported	N/A	N/A	N/A
N-Nitrosodi-n-propylamine [Di-n-propylnitrosamine]	Not Present or Not Reported	N/A	N/A	N/A
N-Nitroso-N-methylethylamine	Not Present or Not Reported	N/A	N/A	N/A
N-Nitrosopiperidine	Not Present or Not Reported	N/A	N/A	N/A
N-Nitrosopyrrolidine	Not Present or Not Reported	N/A	N/A	N/A
Octamethylpyrophosphoramide	Not Present or Not Reported	N/A	N/A	N/A
o-Toluidine	Not Present or Not Reported	N/A	N/A	N/A

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19b. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
p,p -DDD	Not Present or Not Reported	N/A	N/A	N/A
p,p -DDE	Not Present or Not Reported	N/A	N/A	N/A
p,p -DDT	Not Present or Not Reported	N/A	N/A	N/A
Parathion	Not Present or Not Reported	N/A	N/A	N/A
Pentachlorobenzene	Not Present or Not Reported	N/A	N/A	N/A
Pentachlorodibenzo-p-dioxins [PeCDDs]	Not Present or Not Reported	N/A	N/A	N/A
Pentachloronitrobenzene [PCNB] [Quintobenzene] [Quintozene]	Not Present or Not Reported	N/A	N/A	N/A
Perchlorate	Not Present or Not Reported	N/A	N/A	N/A
Phorate	Not Present or Not Reported	N/A	N/A	N/A
Phthalic anhydride	Not Present or Not Reported	N/A	N/A	N/A
Pronamide	Not Present or Not Reported	N/A	N/A	N/A
p-Toluidine	Not Present or Not Reported	N/A	N/A	N/A
Safrole	Not Present or Not Reported	N/A	N/A	N/A
Strychnine	Not Present or Not Reported	N/A	N/A	N/A
Styrene oxide	Not Present or Not Reported	N/A	N/A	N/A
Tetraethyldithiopyrophosphate [Sulfotepp]	Not Present or Not Reported	N/A	N/A	N/A
trans-1,2-Dichloroethylene	Not Present or Not Reported	N/A	N/A	N/A

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-19b. (continued)

Chemical	Number of Impoundments with Chemical Present in Wastewater [1]	Reported Quantity of Chemical in Wastewater (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
trans-1,3-Dichloropropylene	Not Present or Not Reported	N/A	N/A	N/A
Trichlorofluoromethane [Trichloromonofluoromethane] [CFC-11]	Not Present or Not Reported	N/A	N/A	N/A
Tris(2,3-dibromopropyl) phosphate	Not Present or Not Reported	N/A	N/A	N/A
Warfarin	Not Present or Not Reported	N/A	N/A	N/A

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-20a. Chemicals: Presence and Volume in Sludge (for Impoundments with Chemicals/pH of Concern)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Barium	4,269	15,229,003*	201,078*	156,990*
Lead	3,499	6,292,236*	10,960*	13,106*
Zinc	3,282	64,793,166*	1,746,200*	374,157*
Chromium	3,108	3,343,304*	51,779*	21,342*
Nickel	2,773	2,443,425*	53,698*	38,907*
Selenium	2,647	15,851*	0	0
Copper	2,399	21,112,774*	35,953*	31,103*
Arsenic	2,184	1,014,712*	5,546*	10,926*
Manganese	1,937	88,742,093*	542,791*	346,030*
Cadmium	1,921	187,321*	77*	1,265*
Mercury	1,538	10,394*	2*	25*
Vanadium	1,316	9,169*	0	468*
Toluene	1,287	2*	0	0
Cobalt	999	4,124*	0	0
Acetone [2-Propanone]	878*	7*	0	0
Molybdenum	848	651*	0	0
Xylenes, mixed isomers [Xyenes]	809	5,686*	0	51*
Carbon disulfide	787*	1*	0	0
Silver	709	13,527*	0	0
Antimony	670	0	0	0
Beryllium	660	3,246,766*	0	0
Chloroform [Trichloromethane]	632*	2*	0	1*
Ethyl benzene	617	1,004*	0	9*
Phenol	592	160*	273*	0
Benzene	581	0	0	0

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table 20a. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Polychlorinated biphenyls [Aroclors]	533*	86,997*	0	5,354*
Methyl ethyl ketone [2-Butanone][MEK]	518	0	0	0
Sulfide	505	2,423,021*	0	0
Fluoride	433	54,793,440*	0	0
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]	427*	0	0	0
p-Cresol [4-Methyl phenol]	377*	0	0	0
Fluorene	367*	0	0	0
Pyrene	349	3,029*	0	0
Naphthalene	303	2,903*	0	0
Trichloroethylene [TCE]	292*	0	0	0
Chrysene	284	1,788*	0	0
Cyanide	278	30,127*	0	0
n-Dioctyl phthalate	278*	0	0	0
1,2-Dichloroethane [Ethylene dichloride]	273*	0	0	0
2,4-Dimethylphenol	270*	0	0	0
Fluoranthene	259	1,768*	0	0
Benzo(a)pyrene	257	83*	0	0
o-Xylene	253*	0	0	0
Benzo[a]anthracene	248	98*	0	0
Chromium VI [Hexavalent Chromium]	240*	0	2*	0
Thallium	238*	942*	0	0
Di-n-butyl phthalate	238*	0	0	0
n-Butyl alcohol [n-Butanol]	234*	0	4*	0
Aldrin	232*	0	0	0
beta-Hexachlorocyclohexane [beta-BHC]	232*	0	0	0

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table 20a. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Butyl benzyl phthalate	232*	0	0	0
Chlordane, alpha & gamma isomers	232*	0	0	0
Dieldrin	232*	0	0	0
Endrin	232*	0	0	0
Heptachlor	232*	0	0	0
Heptachlor epoxide, alpha, beta, and gamma isomers	232*	0	0	0
Lindane [gamma-Hexachlorocyclohexane] [gamma-BHC]	232*	0	0	0
Methoxychlor	232*	0	0	0
p,p -DDD	232*	0	0	0
p,p -DDE	232*	0	0	0
p,p -DDT	232*	0	0	0
Anthracene	223	0	0	0
Tetrachlorodibenzofurans [TCDFs]	182*	0*	0*	0*
Methylene chloride [Dichloromethane]	173	0*	0	0*
Acenaphthene	165	0	0	0
Dibenz[a,h]anthracene	139	0	0	0
Benzo(b)fluoranthene	133	155*	0	0
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]	128	0	0	0
Cyanide, amenable	126*	0	0	0
Indeno(1,2,3-cd) pyrene	119*	0	0	0
Formaldehyde	111	881*	5,234*	2,640*
Tetrachlorodibenzo-p-dioxins [TCDDs]	108*	0	0	0
Methanol [methyl alcohol]	104	0	1*	0
o-Cresol [2-Methyl phenol]	99*	0	0	0

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table 20a. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Tetrachloroethylene [Perchloroethylene]	99*	0	0	0
1,2-Dichlorobenzene [o-Dichlorobenzene]	98*	0	0	0
Ethylene glycol	81*	0	487*	0
m-Cresol [3-Methyl phenol]	80*	0	0	0
Acetaldehyde [Ethanal]	80*	0	0*	0
1,4-Dichlorobenzene [p-Dichlorobenzene]	77*	0	0	0
Chloromethane [Methyl chloride]	62*	0	0	0*
Styrene	60*	0	0	0
Chlorobenzene	52*	0	0	0
Ethylene thiourea	46*	0	0	0
Thiram [Thiuram]	46*	0	0	0
2,4,6-Trichlorophenol	45*	0	0	0
2,4-Dichlorophenol	45*	0	0	0
2-Chlorophenol [o-Chlorophenol]	45*	0	0	0
Bromomethane [Methyl bromide]	42*	0	0	0
Cresols	41*	0	0	0
1,4-Dioxane [1,4-Diethyleneoxide]	40*	0	100*	0
Isophorone	38*	0	0	0
1,1,1-Trichloroethane [Methyl chloroform]	38*	0	0	0
2,4-Dinitrophenol	38*	0	0	0
Diethyl phthalate [DEP]	38*	0	0	0
Dimethyl phthalate [DMP]	38*	0	0	0
Ethylene dibromide [1,2-Dibromoethane]	38*	0	0	0
Ethylidene dichloride [1,1-Dichloroethane]	38*	0	0	0

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table 20a. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Methyl tert-butyl ether [MTBE]	38*	0	0	0
N,N-Dimethyl formamide [DMF]	38*	0	0	0
N-Nitrosodiphenylamine [Diphenylnitrosamine]	38*	0	0	0
Pyridine	38*	0	0	0
Hexachlorodibenzofurans [HxCDFs]	38*	0*	0	0*
1,2-Dichloropropane [Propylene dichloride]	36*	0	0	0
Bromoform [Tribromomethane]	36*	1*	0	0
1,1-Dichloroethylene [Vinylidene chloride]	29*	0*	0	0
Hexachlorodibenzo-p-dioxins [HxCDDs]	27*	0	0	0
Methyl isobutyl ketone [Hexone] [4-Methyl-2-pentanone] [MIBK]	27*	0	0	0
Pentachlorodibenzofurans [PeCDFs]	27*	0	0	0
Pentachlorodibenzo-p-dioxins [PeCDDs]	27*	0	0	0
Vinyl chloride [chloroethylene]	22*	0	0	0
Bis(2-chloroisopropyl) ether [2,2 -Dichloroisopropyl ether]	21*	0	0	0
Cumene [Isopropyl benzene]	20*	0	0	0
n-Hexane	20*	0	0	0
Bis(2-chloroethyl) ether [sym-Dichloroethyl ether]	14*	0	0	0
Acrolein [2-propenal]	11*	0	0	0
Hexachlorobenzene	11*	0	0	0
1,2,4-Trichlorobenzene	7*	0	0	0
2,3,4,6-Tetrachlorophenol	7*	0	0	0
Pentachlorophenol [PCP]	7*	0	0	0

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table 20a. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Acrylonitrile	4*	0	0	0
Acrylic acid [propenoic acid]	2*	0	17*	0
Allyl alcohol	2*	0	8*	0
Ethylene oxide	2*	0	0*	0
Formic Acid	2*	0	8*	0
1,1,1,2-Tetrachloroethane	Not Present or Not Reported	0	0	0
1,1,2,2-Tetrachloroethane	Not Present or Not Reported	0	0	0
1,1,2-Trichloro-1,2,2-trifluoroethane [Freon 113]	Not Present or Not Reported	0	0	0
1,1,2-Trichloroethane [Vinyl trichloride]	Not Present or Not Reported	0	0	0
1,2,3-Trichloropropane	Not Present or Not Reported	0	0	0
1,2,4,5-Tetrachlorobenzene	Not Present or Not Reported	0	0	0
1,2-Dibromo-3-chloropropane	Not Present or Not Reported	0	0	0
1,2-Diphenylhydrazine	Not Present or Not Reported	0	0	0
1,2-Epoxybutane [1,2-Butylene oxide]	Not Present or Not Reported	0	0	0
1,3,5-Trinitrobenzene [sym-Trinitrobenzene]	Not Present or Not Reported	0	0	0
1,3-Butadiene	Not Present or Not Reported	0	0	0
1,3-Dinitrobenzene [m-Dinitrobenzene]	Not Present or Not Reported	0	0	0
1,3-Phenylenediamine [m-Phenylenediamine]	Not Present or Not Reported	0	0	0
2,4,5-Trichlorophenol	Not Present or Not Reported	0	0	0

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table 20a. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
2,4,5-Trichlorophenoxyacetic acid [2,4,5,-T]	Not Present or Not Reported	0	0	0
2,4-D [2,4-Dichlorophenoxyacetic acid]	Not Present or Not Reported	0	0	0
2,4-Dinitrotoluene	Not Present or Not Reported	0	0	0
2,4-Toluenediamine [2,4-Diaminotoluene]	Not Present or Not Reported	0	0	0
2,6-Dinitrotoluene	Not Present or Not Reported	0	0	0
2-Chloronaphthalene [beta-Chloronaphthalene]	Not Present or Not Reported	0	0	0
2-Ethoxyethanol [Ethylene glycol monoethyl ether]	Not Present or Not Reported	0	0	0
2-Ethoxyethanol acetate [2-EEA]	Not Present or Not Reported	0	0	0
2-Methoxyethanol [methyl cellosolve]	Not Present or Not Reported	0	0	0
2-Methoxyethanol acetate [2-MEA] [methyl cellosolve acetate]	Not Present or Not Reported	0	0	0
2-Nitropropane	Not Present or Not Reported	0	0	0
3,3 -Dichlorobenzidine	Not Present or Not Reported	0	0	0
3,3 -Dimethoxybenzidine	Not Present or Not Reported	0	0	0
3,3 -Dimethylbenzidine	Not Present or Not Reported	0	0	0
3,4-Dimethylphenol	Not Present or Not Reported	0	0	0
3-Methylcholanthrene	Not Present or Not Reported	0	0	0
4,4 -Methylene bis(2-chloroaniline)	Not Present or Not Reported	0	0	0

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table 20a. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
4-Chloroaniline [p-aminochlorobenzene]	Not Present or Not Reported	0	0	0
7,12-Dimethylbenz[a]anthracene	Not Present or Not Reported	0	0	0
Acetonitrile [Methyl cyanide]	Not Present or Not Reported	0	0	0
Acetophenone	Not Present or Not Reported	0	0	0
Acrylamide	Not Present or Not Reported	0	0	0
Aldicarb	Not Present or Not Reported	0	0	0
Allyl chloride	Not Present or Not Reported	0	0	0
alpha-Hexachlorocyclohexane [alpha-BHC]	Not Present or Not Reported	0	0	0
Ammonium vanadate	Not Present or Not Reported	0	0	0
Amonium perchlorate	Not Present or Not Reported	0	0	0
Aniline	Not Present or Not Reported	0	0	0
Aramite	Not Present or Not Reported	0	0	0
Benzidine	Not Present or Not Reported	0	0	0
Benzyl alcohol	Not Present or Not Reported	0	0	0
Benzyl chloride	Not Present or Not Reported	0	0	0
Bis(chloromethyl) ether [sym-Dichloromethyl ether]	Not Present or Not Reported	0	0	0
Bromodichloromethane [Dichlorobromomethane]	Not Present or Not Reported	0	0	0

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table 20a. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Carbon tetrachloride	Not Present or Not Reported	0	0	0
Chloral [Trichloroacetaldehyde]	Not Present or Not Reported	0	0	0
Chloral hydrate [Trichloroacetaldehyde hydrate]	Not Present or Not Reported	0	0	0
Chlorobenzilate	Not Present or Not Reported	0	0	0
Chlorodibromomethane [Dibromochloromethane]	Not Present or Not Reported	0	0	0
Chloroethane [Ethyl chloride]	Not Present or Not Reported	0	0	0
Chloromethyl Methyl Ether	Not Present or Not Reported	0	0	0
Chloroprene [2-Chloro-1,3-butadiene]	Not Present or Not Reported	0	0	0
cis-1,2-Dichloroethylene	Not Present or Not Reported	0	0	0
cis-1,3-Dichloropropylene	Not Present or Not Reported	0	0	0
Cyanogen bromide [Bromine cyanide]	Not Present or Not Reported	0	0	0
Cyanogen chloride [Chlorine cyanide]	Not Present or Not Reported	0	0	0
Cyclohexanol	Not Present or Not Reported	0	0	0
Cyclohexanone	Not Present or Not Reported	0	0	0
Diallate	Not Present or Not Reported	0	0	0
Dichlorodifluoromethane [CFC-12]	Not Present or Not Reported	0	0	0
Diethylstilbestrol [DES]	Not Present or Not Reported	0	0	0

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table 20a. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Dimethoate	Not Present or Not Reported	0	0	0
Dinoseb [2-sec-Butyl-4,6-dinitrophenol]	Not Present or Not Reported	0	0	0
Diphenylamine	Not Present or Not Reported	0	0	0
Direct Black 38	Not Present or Not Reported	0	0	0
Direct Blue 6	Not Present or Not Reported	0	0	0
Direct Brown 95	Not Present or Not Reported	0	0	0
Disulfoton	Not Present or Not Reported	0	0	0
Endosulfan	Not Present or Not Reported	0	0	0
Endothall	Not Present or Not Reported	0	0	0
Epichlorohydrin [1-Chloro-2,3-epoxypropane]	Not Present or Not Reported	0	0	0
Ethyl acetate	Not Present or Not Reported	0	0	0
Ethyl ether [Diethyl ether]	Not Present or Not Reported	0	0	0
Ethyl methacrylate	Not Present or Not Reported	0	0	0
Ethyl methanesulfonate	Not Present or Not Reported	0	0	0
Furan	Not Present or Not Reported	0	0	0
Furfural	Not Present or Not Reported	0	0	0
Glycidylaldehyde	Not Present or Not Reported	0	0	0

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table 20a. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Hexachloro-1,3-butadiene [Hexachlorobutadiene]	Not Present or Not Reported	0	0	0
Hexachlorocyclopentadiene	Not Present or Not Reported	0	0	0
Hexachloroethane	Not Present or Not Reported	0	0	0
Hexachlorophene	Not Present or Not Reported	0	0	0
Hydrazine	Not Present or Not Reported	0	0	0
Isobutyl alcohol [Isobutanol]	Not Present or Not Reported	0	0	0
Kepone	Not Present or Not Reported	0	0	0
Maleic anhydride	Not Present or Not Reported	0	0	0
Maleic hydrazide	Not Present or Not Reported	0	0	0
Methacrylonitrile	Not Present or Not Reported	0	0	0
Methomyl	Not Present or Not Reported	0	0	0
Methyl methacrylate	Not Present or Not Reported	0	0	0
Methyl parathion	Not Present or Not Reported	0	0	0
Methylene bromide [Dibromomethane]	Not Present or Not Reported	0	0	0
m-Xylene	Not Present or Not Reported	0	0	0
Nickel Subsulfide	Not Present or Not Reported	0	0	0
Nitrobenzene	Not Present or Not Reported	0	0	0

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table 20a. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
N-Nitrosodiethylamine	Not Present or Not Reported	0	0	0
N-Nitrosodimethylamine	Not Present or Not Reported	0	0	0
N-Nitrosodi-n-butylamine	Not Present or Not Reported	0	0	0
N-Nitrosodi-n-propylamine [Di-n-propylnitrosamine]	Not Present or Not Reported	0	0	0
N-Nitroso-N-methylethylamine	Not Present or Not Reported	0	0	0
N-Nitrosopiperidine	Not Present or Not Reported	0	0	0
N-Nitrosopyrrolidine	Not Present or Not Reported	0	0	0
Octamethylpyrophosphoramide	Not Present or Not Reported	0	0	0
o-Toluidine	Not Present or Not Reported	0	0	0
Parathion	Not Present or Not Reported	0	0	0
Pentachlorobenzene	Not Present or Not Reported	0	0	0
Pentachloronitrobenzene [PCNB] [Quintobenzene] [Quintozene]	Not Present or Not Reported	0	0	0
Perchlorate	Not Present or Not Reported	0	0	0
Phorate	Not Present or Not Reported	0	0	0
Phthalic anhydride	Not Present or Not Reported	0	0	0
Pronamide	Not Present or Not Reported	0	0	0
Propylene oxide [1,2-Epoxypropane]	Not Present or Not Reported	0	0	0

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table 20a. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
p-Toluidine	Not Present or Not Reported	0	0	0
p-Xylene	Not Present or Not Reported	0	0	0
Safrole	Not Present or Not Reported	0	0	0
Silvex [2,4,5-Trichlorophenoxypropionic acid]	Not Present or Not Reported	0	0	0
Strychnine	Not Present or Not Reported	0	0	0
Styrene oxide	Not Present or Not Reported	0	0	0
Tetraethyldithiopyrophosphate [Sulfotepp]	Not Present or Not Reported	0	0	0
Toxaphene [Chlorinated camphene]	Not Present or Not Reported	0	0	0
trans-1,2-Dichloroethylene	Not Present or Not Reported	0	0	0
trans-1,3-Dichloropropylene	Not Present or Not Reported	0	0	0
Trichlorofluoromethane [Trichloromonofluoromethane] [CFC-11]	Not Present or Not Reported	0	0	0
Triethylamine	Not Present or Not Reported	0	0	0
Tris(2,3-dibromopropyl) phosphate	Not Present or Not Reported	0	0	0
Vinyl acetate	Not Present or Not Reported	0	0	0
Warfarin	Not Present or Not Reported	0	0	0

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-20b. Standard Errors for Chemicals: Presence and Volume in Sludge (for Impoundments with Chemicals/pH of Concern)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Barium	1,203	11,198,278*	204,414*	168,935*
Lead	1,035	7,557,758*	10,402*	9,563*
Zinc	644	69,522,056*	1,563,828*	245,664*
Chromium	801	3,930,014*	46,243*	23,369*
Nickel	634	1,622,692*	52,842*	31,510*
Selenium	1,036	19,857*	N/A	N/A
Copper	521	17,034,712*	27,576*	20,442*
Arsenic	494	943,882*	5,612*	8,898*
Manganese	467	78,768,980*	550,742*	408,023*
Cadmium	473	186,252*	77*	1,265*
Mercury	438	7,078*	2*	25*
Vanadium	425	7,611*	N/A	840*
Toluene	480	2*	N/A	N/A
Cobalt	373	4,124*	N/A	N/A
Acetone [2-Propanone]	486*	7*	N/A	N/A
Molybdenum	330	616*	N/A	N/A
Xylenes, mixed isomers [Xyenes]	305	9,885*	N/A	89*
Carbon disulfide	485*	0.5*	N/A	N/A
Silver	234	13,993*	N/A	N/A
Antimony	267	N/A	N/A	N/A
Beryllium	282	3,258,540*	N/A	N/A
Chloroform [Trichloromethane]	468*	2*	N/A	1*
Ethyl benzene	248	1,742*	N/A	16*
Phenol	164	165*	475*	N/A
Benzene	267	N/A	N/A	N/A

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-20b. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Polychlorinated biphenyls [Aroclors]	338*	158,541*	N/A	9,899*
Methyl ethyl ketone [2-Butanone][MEK]	255	N/A	N/A	N/A
Sulfide	213	2,704,783*	N/A	N/A
Fluoride	131	55,465,247*	N/A	N/A
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]	242*	N/A	N/A	N/A
p-Cresol [4-Methyl phenol]	236*	N/A	N/A	N/A
Fluorene	234*	N/A	N/A	N/A
Pyrene	118	3,099*	N/A	N/A
Naphthalene	92	5,020*	N/A	N/A
Trichloroethylene [TCE]	236*	N/A	N/A	N/A
Chrysene	88	1,788*	N/A	N/A
Cyanide	121	36,371*	N/A	N/A
n-Dioctyl phthalate	236*	N/A	N/A	N/A
1,2-Dichloroethane [Ethylene dichloride]	235*	N/A	N/A	N/A
2,4-Dimethylphenol	235*	N/A	N/A	N/A
Fluoranthene	87	3,181*	N/A	N/A
Benzo(a)pyrene	114	151*	N/A	N/A
o-Xylene	233*	N/A	N/A	N/A
Benzo[a]anthracene	86	178*	N/A	N/A
Chromium VI [Hexavalent Chromium]	121*	N/A	4*	N/A
Thallium	129*	950*	N/A	N/A
Di-n-butyl phthalate	135*	N/A	N/A	N/A
n-Butyl alcohol [n-Butanol]	232*	N/A	14*	N/A
Aldrin	232*	N/A	N/A	N/A

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-20b. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
beta-Hexachlorocyclohexane [beta-BHC]	232*	N/A	N/A	N/A
Butyl benzyl phthalate	232*	N/A	N/A	N/A
Chlordane, alpha & gamma isomers	232*	N/A	N/A	N/A
Dieldrin	232*	N/A	N/A	N/A
Endrin	232*	N/A	N/A	N/A
Heptachlor	232*	N/A	N/A	N/A
Heptachlor epoxide, alpha, beta, and gamma isomers	232*	N/A	N/A	N/A
Lindane [gamma-Hexachlorocyclohexane] [gamma-BHC]	232*	N/A	N/A	N/A
Methoxychlor	232*	N/A	N/A	N/A
p,p -DDD	232*	N/A	N/A	N/A
p,p -DDE	232*	N/A	N/A	N/A
p,p -DDT	232*	N/A	N/A	N/A
Anthracene	79	N/A	N/A	N/A
Tetrachlorodibenzofurans [TCDFs]	93*	0.1*	0.04*	0.05*
Methylene chloride [Dichloromethane]	72	0.08*	N/A	0.005*
Acenaphthene	68	N/A	N/A	N/A
Dibenz[a,h]anthracene	67	N/A	N/A	N/A
Benzo(b)fluoranthene	65	282*	N/A	N/A
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]	54	N/A	N/A	N/A
Cyanide, amenable	106*	N/A	N/A	N/A
Indeno(1,2,3-cd) pyrene	63*	N/A	N/A	N/A
Formaldehyde	50	1,560*	5,819*	3,849*

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-20b. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Tetrachlorodibenzo-p-dioxins [TCDDs]	57*	N/A	N/A	N/A
Methanol [methyl alcohol]	49	N/A	2*	N/A
o-Cresol [2-Methyl phenol]	58*	N/A	N/A	N/A
Tetrachloroethylene [Perchloroethylene]	59*	N/A	N/A	N/A
1,2-Dichlorobenzene [o-Dichlorobenzene]	56*	N/A	N/A	N/A
Ethylene glycol	45*	N/A	1,651*	N/A
m-Cresol [3-Methyl phenol]	54*	N/A	N/A	N/A
Acetaldehyde [Ethanal]	43*	N/A	0.8*	N/A
1,4-Dichlorobenzene [p-Dichlorobenzene]	54*	N/A	N/A	N/A
Chloromethane [Methyl chloride]	45*	N/A	N/A	0.04*
Styrene	44*	N/A	N/A	N/A
Chlorobenzene	41*	N/A	N/A	N/A
Ethylene thiourea	46*	N/A	N/A	N/A
Thiram [Thiuram]	46*	N/A	N/A	N/A
2,4,6-Trichlorophenol	39*	N/A	N/A	N/A
2,4-Dichlorophenol	39*	N/A	N/A	N/A
2-Chlorophenol [o-Chlorophenol]	39*	N/A	N/A	N/A
Bromomethane [Methyl bromide]	42*	N/A	N/A	N/A
Cresols	31*	N/A	N/A	N/A
1,4-Dioxane [1,4-Diethyleneoxide]	38*	N/A	340*	N/A
Isophorone	38*	N/A	N/A	N/A
1,1,1-Trichloroethane [Methyl chloroform]	38*	N/A	N/A	N/A
2,4-Dinitrophenol	38*	N/A	N/A	N/A
Diethyl phthalate [DEP]	38*	N/A	N/A	N/A

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-20b. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Dimethyl phthalate [DMP]	38*	N/A	N/A	N/A
Ethylene dibromide [1,2-Dibromoethane]	38*	N/A	N/A	N/A
Ethylidene dichloride [1,1-Dichloroethane]	38*	N/A	N/A	N/A
Methyl tert-butyl ether [MTBE]	38*	N/A	N/A	N/A
N,N-Dimethyl formamide [DMF]	38*	N/A	N/A	N/A
N-Nitrosodiphenylamine [Diphenylnitrosamine]	38*	N/A	N/A	N/A
Pyridine	38*	N/A	N/A	N/A
Hexachlorodibenzofurans [HxCDFs]	29*	0.007*	N/A	0.02*
1,2-Dichloropropane [Propylene dichloride]	36*	N/A	N/A	N/A
Bromoform [Tribromomethane]	36*	1*	N/A	N/A
1,1-Dichloroethylene [Vinylidene chloride]	29*	0.08*	N/A	N/A
Hexachlorodibenzo-p-dioxins [HxCDDs]	25*	N/A	N/A	N/A
Methyl isobutyl ketone [Hexone] [4-Methyl-2-pentanone] [MIBK]	25*	N/A	N/A	N/A
Pentachlorodibenzofurans [PeCDFs]	25*	N/A	N/A	N/A
Pentachlorodibenzo-p-dioxins [PeCDDs]	25*	N/A	N/A	N/A
Vinyl chloride [chloroethylene]	22*	N/A	N/A	N/A
Bis(2-chloroisopropyl) ether [2,2 -Dichloroisopropyl ether]	22*	N/A	N/A	N/A
Cumene [Isopropyl benzene]	22*	N/A	N/A	N/A
n-Hexane	22*	N/A	N/A	N/A
Bis(2-chloroethyl) ether [sym-Dichloroethyl ether]	18*	N/A	N/A	N/A
Acrolein [2-propenal]	16*	N/A	N/A	N/A

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-20b. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Ethylene thiourea	46*	N/A	N/A	N/A
Thiram [Thiuram]	46*	N/A	N/A	N/A
2,4,6-Trichlorophenol	39*	N/A	N/A	N/A
2,4-Dichlorophenol	39*	N/A	N/A	N/A
2-Chlorophenol [o-Chlorophenol]	39*	N/A	N/A	N/A
Bromomethane [Methyl bromide]	42*	N/A	N/A	N/A
Cresols	31*	N/A	N/A	N/A
1,4-Dioxane [1,4-Diethyleneoxide]	38*	N/A	340*	N/A
Isophorone	38*	N/A	N/A	N/A
1,1,1-Trichloroethane [Methyl chloroform]	38*	N/A	N/A	N/A
2,4-Dinitrophenol	38*	N/A	N/A	N/A
Diethyl phthalate [DEP]	38*	N/A	N/A	N/A
Hexachlorobenzene	16*	N/A	N/A	N/A
1,2,4-Trichlorobenzene	12*	N/A	N/A	N/A
2,3,4,6-Tetrachlorophenol	12*	N/A	N/A	N/A
Pentachlorophenol [PCP]	12*	N/A	N/A	N/A
Acrylonitrile	9*	N/A	N/A	N/A
Acrylic acid [propenoic acid]	7*	N/A	58*	N/A
Allyl alcohol	7*	N/A	26*	N/A
Ethylene oxide	7*	N/A	0.2*	N/A
Formic Acid	7*	N/A	28*	N/A
1,1,1,2-Tetrachloroethane	Not Present or Not Reported	N/A	N/A	N/A
1,1,2,2-Tetrachloroethane	Not Present or Not Reported	N/A	N/A	N/A
1,1,2-Trichloro-1,2,2-trifluoroethane [Freon 113]	Not Present or Not Reported	N/A	N/A	N/A

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-20b. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
1,1,2-Trichloroethane [Vinyl trichloride]	Not Present or Not Reported	N/A	N/A	N/A
1,2,3-Trichloropropane	Not Present or Not Reported	N/A	N/A	N/A
1,2,4,5-Tetrachlorobenzene	Not Present or Not Reported	N/A	N/A	N/A
1,2-Dibromo-3-chloropropane	Not Present or Not Reported	N/A	N/A	N/A
1,2-Diphenylhydrazine	Not Present or Not Reported	N/A	N/A	N/A
1,2-Epoxybutane [1,2-Butylene oxide]	Not Present or Not Reported	N/A	N/A	N/A
1,3,5-Trinitrobenzene [sym-Trinitrobenzene]	Not Present or Not Reported	N/A	N/A	N/A
1,3-Butadiene	Not Present or Not Reported	N/A	N/A	N/A
1,3-Dinitrobenzene [m-Dinitrobenzene]	Not Present or Not Reported	N/A	N/A	N/A
1,3-Phenylenediamine [m-Phenylenediamine]	Not Present or Not Reported	N/A	N/A	N/A
2,4,5-Trichlorophenol	Not Present or Not Reported	N/A	N/A	N/A
2,4,5-Trichlorophenoxyacetic acid [2,4,5,-T]	Not Present or Not Reported	N/A	N/A	N/A
2,4-D [2,4-Dichlorophenoxyacetic acid]	Not Present or Not Reported	N/A	N/A	N/A
2,4-Dinitrotoluene	Not Present or Not Reported	N/A	N/A	N/A
2,4-Toluenediamine [2,4-Diaminotoluene]	Not Present or Not Reported	N/A	N/A	N/A
2,6-Dinitrotoluene	Not Present or Not Reported	N/A	N/A	N/A
2-Chloronaphthalene [beta-Chloronaphthalene]	Not Present or Not Reported	N/A	N/A	N/A

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-20b. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
2-Ethoxyethanol [Ethylene glycol monoethyl ether]	Not Present or Not Reported	N/A	N/A	N/A
2-Ethoxyethanol acetate [2-EEA]	Not Present or Not Reported	N/A	N/A	N/A
2-Methoxyethanol [methyl cellosolve]	Not Present or Not Reported	N/A	N/A	N/A
2-Methoxyethanol acetate [2-MEA] [methyl cellosolve acetate]	Not Present or Not Reported	N/A	N/A	N/A
2-Nitropropane	Not Present or Not Reported	N/A	N/A	N/A
3,3 -Dichlorobenzidine	Not Present or Not Reported	N/A	N/A	N/A
3,3 -Dimethoxybenzidine	Not Present or Not Reported	N/A	N/A	N/A
3,3 -Dimethylbenzidine	Not Present or Not Reported	N/A	N/A	N/A
3,4-Dimethylphenol	Not Present or Not Reported	N/A	N/A	N/A
3-Methylcholanthrene	Not Present or Not Reported	N/A	N/A	N/A
4,4 -Methylene bis(2-chloroaniline)	Not Present or Not Reported	N/A	N/A	N/A
4-Chloroaniline [p-aminochlorobenzene]	Not Present or Not Reported	N/A	N/A	N/A
7,12-Dimethylbenz[a]anthracene	Not Present or Not Reported	N/A	N/A	N/A
Acetonitrile [Methyl cyanide]	Not Present or Not Reported	N/A	N/A	N/A
Acetophenone	Not Present or Not Reported	N/A	N/A	N/A
Acrylamide	Not Present or Not Reported	N/A	N/A	N/A
Aldicarb	Not Present or Not Reported	N/A	N/A	N/A

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-20b. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Allyl chloride	Not Present or Not Reported	N/A	N/A	N/A
alpha-Hexachlorocyclohexane [alpha-BHC]	Not Present or Not Reported	N/A	N/A	N/A
Ammonium vanadate	Not Present or Not Reported	N/A	N/A	N/A
Amonium perchlorate	Not Present or Not Reported	N/A	N/A	N/A
Aniline	Not Present or Not Reported	N/A	N/A	N/A
Aramite	Not Present or Not Reported	N/A	N/A	N/A
Benzidine	Not Present or Not Reported	N/A	N/A	N/A
Benzyl alcohol	Not Present or Not Reported	N/A	N/A	N/A
Benzyl chloride	Not Present or Not Reported	N/A	N/A	N/A
Bis(chloromethyl) ether [sym-Dichloromethyl ether]	Not Present or Not Reported	N/A	N/A	N/A
Bromodichloromethane [Dichlorobromomethane]	Not Present or Not Reported	N/A	N/A	N/A
Carbon tetrachloride	Not Present or Not Reported	N/A	N/A	N/A
Chloral [Trichloroacetaldehyde]	Not Present or Not Reported	N/A	N/A	N/A
Chloral hydrate [Trichloroacetaldehyde hydrate]	Not Present or Not Reported	N/A	N/A	N/A
Chlorobenzilate	Not Present or Not Reported	N/A	N/A	N/A
Chlorodibromomethane [Dibromochloromethane]	Not Present or Not Reported	N/A	N/A	N/A
Chloroethane [Ethyl chloride]	Not Present or Not Reported	N/A	N/A	N/A
Chloromethyl Methyl Ether	Not Present or Not Reported	N/A	N/A	N/A

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-20b. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Chloroprene [2-Chloro-1,3-butadiene]	Not Present or Not Reported	N/A	N/A	N/A
cis-1,2-Dichloroethylene	Not Present or Not Reported	N/A	N/A	N/A
cis-1,3-Dichloropropylene	Not Present or Not Reported	N/A	N/A	N/A
Cyanogen bromide [Bromine cyanide]	Not Present or Not Reported	N/A	N/A	N/A
Cyanogen chloride [Chlorine cyanide]	Not Present or Not Reported	N/A	N/A	N/A
Cyclohexanol	Not Present or Not Reported	N/A	N/A	N/A
Cyclohexanone	Not Present or Not Reported	N/A	N/A	N/A
Diallate	Not Present or Not Reported	N/A	N/A	N/A
Dichlorodifluoromethane [CFC-12]	Not Present or Not Reported	N/A	N/A	N/A
Diethylstilbestrol [DES]	Not Present or Not Reported	N/A	N/A	N/A
Dimethoate	Not Present or Not Reported	N/A	N/A	N/A
Dinoseb [2-sec-Butyl-4,6-dinitrophenol]	Not Present or Not Reported	N/A	N/A	N/A
Diphenylamine	Not Present or Not Reported	N/A	N/A	N/A
Direct Black 38	Not Present or Not Reported	N/A	N/A	N/A
Direct Blue 6	Not Present or Not Reported	N/A	N/A	N/A
Direct Brown 95	Not Present or Not Reported	N/A	N/A	N/A
Disulfoton	Not Present or Not Reported	N/A	N/A	N/A

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-20b. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Endosulfan	Not Present or Not Reported	N/A	N/A	N/A
Endothall	Not Present or Not Reported	N/A	N/A	N/A
Epichlorohydrin [1-Chloro-2,3-epoxypropane]	Not Present or Not Reported	N/A	N/A	N/A
Ethyl acetate	Not Present or Not Reported	N/A	N/A	N/A
Ethyl ether [Diethyl ether]	Not Present or Not Reported	N/A	N/A	N/A
Ethyl methacrylate	Not Present or Not Reported	N/A	N/A	N/A
Ethyl methanesulfonate	Not Present or Not Reported	N/A	N/A	N/A
Furan	Not Present or Not Reported	N/A	N/A	N/A
Furfural	Not Present or Not Reported	N/A	N/A	N/A
Glycidylaldehyde	Not Present or Not Reported	N/A	N/A	N/A
Hexachloro-1,3-butadiene [Hexachlorobutadiene]	Not Present or Not Reported	N/A	N/A	N/A
Hexachlorocyclopentadiene	Not Present or Not Reported	N/A	N/A	N/A
Hexachloroethane	Not Present or Not Reported	N/A	N/A	N/A
Hexachlorophene	Not Present or Not Reported	N/A	N/A	N/A
Hydrazine	Not Present or Not Reported	N/A	N/A	N/A
Isobutyl alcohol [Isobutanol]	Not Present or Not Reported	N/A	N/A	N/A
Kepone	Not Present or Not Reported	N/A	N/A	N/A
Maleic anhydride	Not Present or Not Reported	N/A	N/A	N/A

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-20b. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Maleic hydrazide	Not Present or Not Reported	N/A	N/A	N/A
Methacrylonitrile	Not Present or Not Reported	N/A	N/A	N/A
Methomyl	Not Present or Not Reported	N/A	N/A	N/A
Methyl methacrylate	Not Present or Not Reported	N/A	N/A	N/A
Methyl parathion	Not Present or Not Reported	N/A	N/A	N/A
Methylene bromide [Dibromomethane]	Not Present or Not Reported	N/A	N/A	N/A
m-Xylene	Not Present or Not Reported	N/A	N/A	N/A
Nickel Subsulfide	Not Present or Not Reported	N/A	N/A	N/A
Nitrobenzene	Not Present or Not Reported	N/A	N/A	N/A
N-Nitrosodiethylamine	Not Present or Not Reported	N/A	N/A	N/A
N-Nitrosodimethylamine	Not Present or Not Reported	N/A	N/A	N/A
N-Nitrosodi-n-butylamine	Not Present or Not Reported	N/A	N/A	N/A
N-Nitrosodi-n-propylamine [Di-n-propylnitrosamine]	Not Present or Not Reported	N/A	N/A	N/A
N-Nitroso-N-methylethylamine	Not Present or Not Reported	N/A	N/A	N/A
N-Nitrosopiperidine	Not Present or Not Reported	N/A	N/A	N/A
N-Nitrosopyrrolidine	Not Present or Not Reported	N/A	N/A	N/A
Octamethylpyrophosphoramide	Not Present or Not Reported	N/A	N/A	N/A
o-Toluidine	Not Present or Not Reported	N/A	N/A	N/A

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-20b. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
Parathion	Not Present or Not Reported	N/A	N/A	N/A
Pentachlorobenzene	Not Present or Not Reported	N/A	N/A	N/A
Pentachloronitrobenzene [PCNB] [Quintobenzene] [Quintozene]	Not Present or Not Reported	N/A	N/A	N/A
Perchlorate	Not Present or Not Reported	N/A	N/A	N/A
Phorate	Not Present or Not Reported	N/A	N/A	N/A
Phthalic anhydride	Not Present or Not Reported	N/A	N/A	N/A
Pronamide	Not Present or Not Reported	N/A	N/A	N/A
Propylene oxide [1,2-Epoxypropane]	Not Present or Not Reported	N/A	N/A	N/A
p-Toluidine	Not Present or Not Reported	N/A	N/A	N/A
p-Xylene	Not Present or Not Reported	N/A	N/A	N/A
Safrole	Not Present or Not Reported	N/A	N/A	N/A
Silvex [2,4,5-Trichlorophenoxypropionic acid]	Not Present or Not Reported	N/A	N/A	N/A
Strychnine	Not Present or Not Reported	N/A	N/A	N/A
Styrene oxide	Not Present or Not Reported	N/A	N/A	N/A
Tetraethyldithiopyrophosphate [Sulfotepp]	Not Present or Not Reported	N/A	N/A	N/A
Toxaphene [Chlorinated camphene]	Not Present or Not Reported	N/A	N/A	N/A
trans-1,2-Dichloroethylene	Not Present or Not Reported	N/A	N/A	N/A

(continued)

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-20b. (continued)

Chemical	Number of Impoundments with Chemical Present in Sludge [1]	Reported Quantity of Chemical in Sludge (All Impoundments) [2]		
		Within Impoundment (kg)	Influent (kg/yr)	Effluent (kg/yr)
trans-1,3-Dichloropropylene	Not Present or Not Reported	N/A	N/A	N/A
Trichlorofluoromethane [Trichloromonofluoromethane] [CFC-11]	Not Present or Not Reported	N/A	N/A	N/A
Triethylamine	Not Present or Not Reported	N/A	N/A	N/A
Tris(2,3-dibromopropyl) phosphate	Not Present or Not Reported	N/A	N/A	N/A
Vinyl acetate	Not Present or Not Reported	N/A	N/A	N/A
Warfarin	Not Present or Not Reported	N/A	N/A	N/A

1. Chemical presence in influent, effluent, or within impoundment, as indicated by reported value or check for "present but quantity unknown."
2. Calculated from reported concentration or flux.

Table B-21. Comparison of Survey Data and Risk Input Data: Chemical Categories for Wastewater and Sludge at Influent, In Impoundment, and Effluent Sampling Points

Survey Database Chemical Data

Chemical Categories	Wastewater (< 5 weight percent solids)						Sludge (≥ 5 weight percent solids)					
	Influent		In Impoundment		Effluent		Influent		In Impoundment		Effluent	
	#	%	#	%	#	%	#	%	#	%	#	%
VOCs	5,866	76	5,412	76	4,815	72	1,690	4	2,006	21	1,311	14
SVOCs	3,824	75	3,786	75	3,508	69	863	7	1,261	24	605	3
Metals	9,966	84	9,982	83	7,762	85	3,925	42	5,551	98	3,078	88
Dioxin-like compounds	291	24	218	21	346	22	247	10	861	35	412	41
Mercury	2,483	27	2,479	30	2,235	31	1,061	0.9	1,745	66	826	6
PBTs	6,870	71	7,216	72	4,989	67	2,556	13	4,539	91	2,269	72
Any chemicals	10,745	96	10,766	97	8,187	92	4,101	45	5,759	100	3,230	89
Percent missing overall	16	42	24	24	16	34	30	63	21	47	19	36
Number nonmissing zero dischargers*	30	10	28	26	30	17	22	12	23	16	30	23

Risk Input Database Chemical Data

Chemical Categories	Wastewater (< 5 weight percent solids)						Sludge (≥ 5 weight percent solids)					
	Influent		In Impoundment		Effluent		Influent		In Impoundment		Effluent	
	#	%	#	%	#	%	#	%	#	%	#	%
VOCs	5,791	85	5,835	77	NA	NA	NA	NA	3,417	79	NA	NA
SVOCs	4,819	83	4,819	81	NA	NA	NA	NA	2,914	78	NA	NA
Metals	10,476	89	10,493	85	NA	NA	NA	NA	6,293	100	NA	NA
Dioxin-like compounds	811	41	811	33	NA	NA	NA	NA	1,343	64	NA	NA
Mercury	2,934	45	2,934	36	NA	NA	NA	NA	2,228	70	NA	NA
PBTs	8,648	80	8,676	83	NA	NA	NA	NA	5,302	97	NA	NA
Any chemicals	11,345	100	11,345	99	NA	NA	NA	NA	6,559	100	NA	NA
Percent missing overall	16	42	24	24	NA	NA	NA	NA	21	47	NA	NA
Number nonmissing zero dischargers*	30	10	28	26	NA	NA	NA	NA	23	16	NA	NA

For both tables: # = number of impoundments
% = percent of total volume
NA = not applicable
*Total number of Zero Dischargers = 36

Table B-22. Chemical Presence in Wastewater Influent by SIC Code (Survey Database)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Acenaphthene					✔	✔			✔							
Acetaldehyde [Ethanal]				✔	✔											
Acetone [2-Propanone]				✔	✔	✔										
Acetonitrile [Methyl cyanide]																
Acetophenone																
Acrolein [2-propenal]					✔											
Acrylamide																
Acrylic acid [propenoic acid]					✔											
Acrylonitrile					✔											
Aldicarb																
Aldrin																
Allyl alcohol					✔											
Allyl chloride					✔											
Ammonium vanadate																
Ammonium perchlorate																
Aniline				✔	✔	✔										
Anthracene				✔	✔	✔			✔							
Antimony				✔	✔	✔		✔	✔	✔						
Aramite																
Arsenic				✔	✔	✔			✔	✔						
Barium		✔	✔	✔	✔	✔	✔	✔	✔	✔		✔			✔	
Benzene					✔	✔			✔						✔	
Benzidine																
Benzo(a)pyrene				✔		✔			✔							
Benzo(b)fluoranthene				✔		✔			✔							
Benzo[a]anthracene				✔		✔			✔							
Benzyl alcohol				✔	✔	✔										
Benzyl chloride																
Beryllium				✔	✔	✔		✔	✔							
beta-Hexachlorocyclohexane [beta-BHC]				✔												
Bis(2-chloroethyl) ether [sym-Dichloroethyl ether]																
Bis(2-chloroisopropyl) ether [2,2'-Dichloroisopropyl ether]					✔											
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]		✔		✔	✔	✔	✔									
Bis(chloromethyl) ether [sym-Dichloromethyl ether]																
Bromodichloromethane [Dichlorobromomethane]				✔	✔	✔	✔									
Bromoform [Tribromomethane]					✔	✔	✔									
Bromomethane [Methyl bromide]					✔											
1,3-Butadiene																
n-Butyl alcohol [n-Butanol]					✔											
Butyl benzyl phthalate																
Cadmium		✔		✔	✔	✔	✔	✔	✔	✔						
Carbon disulfide				✔	✔	✔										
Carbon tetrachloride					✔											
Chloral [Trichloroacetaldehyde]																

(continued)

Table B-22. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Chloral hydrate [Trichloroacetaldehyde hydrate]																
Chlordane, alpha & gamma isomers																
4-Chloroaniline [p-aminochlorobenzene]																
Chlorobenzene					✔	✔										
Chlorobenzilate																
Chlorodibromomethane [Dibromochloromethane]				✔	✔	✔	✔									
Chloroethane [Ethyl chloride]					✔											
Chloroform [Trichloromethane]				✔	✔	✔	✔		✔							
Chloromethane [Methyl chloride]				✔	✔											
Chloromethyl methyl ether																
2-Chloronaphthalene [beta-Chloronaphthalene]																
2-Chlorophenol [o-Chlorophenol]				✔	✔											
Chloroprene [2-Chloro-1,3-butadiene]					✔											
Chromium		✔		✔	✔	✔		✔	✔	✔		✔			✔	
Chromium VI [Hexavalent Chromium]					✔	✔			✔							
Chrysene				✔		✔			✔							
Cobalt				✔	✔	✔										
Copper		✔		✔	✔	✔	✔		✔	✔		✔			✔	
m-Cresol [3-Methyl phenol]						✔										
o-Cresol [2-Methyl phenol]					✔	✔										
p-Cresol [4-Methyl phenol]					✔	✔										
Cresols				✔												
Cumene [Isopropyl benzene]				✔												
Cyanide		✔		✔	✔	✔			✔							
Cyanide, amenable					✔	✔			✔							
Cyanogen bromide [Bromine cyanide]																
Cyanogen chloride [Chlorine cyanide]																
Cyclohexanol					✔											
Cyclohexanone				✔	✔											
2,4-D [2,4-Dichlorophenoxyacetic acid]																
p,p'-DDD																
p,p'-DDE																
p,p'-DDT																
Di-n-butyl phthalate					✔	✔	✔									
Diallate																
Dibenz[a,h]anthracene						✔			✔							
1,2-Dibromo-3-chloropropane																
1,2-Dichlorobenzene [o-Dichlorobenzene]					✔	✔										
1,4-Dichlorobenzene [p-Dichlorobenzene]						✔										
3,3'-Dichlorobenzidine																
Dichlorodifluoromethane [CFC-12]																
1,2-Dichloroethane [Ethylene dichloride]					✔	✔										
1,1-Dichloroethylene [Vinylidene chloride]					✔											

(continued)

Table B-22. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
cis-1,2-Dichloroethylene																
trans-1,2-Dichloroethylene																
2,4-Dichlorophenol				✔	✔											
1,2-Dichloropropane [Propylene dichloride]					✔											
cis-1,3-Dichloropropylene																
trans-1,3-Dichloropropylene																
Dieldrin																
Diethyl phthalate [DEP]					✔	✔										
Diethylstilbestrol [DES]																
Dimethoate																
3,3'-Dimethoxybenzidine																
N,N-Dimethyl formamide [DMF]					✔	✔										
Dimethyl phthalate [DMP]						✔										
7,12-Dimethylbenz[a]anthracene																
3,3'-Dimethylbenzidine																
2,4-Dimethylphenol				✔		✔										
3,4-Dimethylphenol																
1,3-Dinitrobenzene [m-Dinitrobenzene]																
2,4-Dinitrophenol						✔										
2,4-Dinitrotoluene																
2,6-Dinitrotoluene																
Dinoseb [2-sec-Butyl-4,6-dinitrophenol]																
n-Dioctyl phthalate					✔		✔									
1,4-Dioxane [1,4-Diethyleneoxide]					✔	✔										
Diphenylamine																
1,2-Diphenylhydrazine																
Direct Black 38																
Direct Blue 6																
Direct Brown 95																
Disulfoton																
Endosulfan																
Endothall																
Endrin																
Epichlorohydrin [1-Chloro-2,3-epoxypropane]		✔			✔											
1,2-Epoxybutane [1,2-Butylene oxide]																
2-Ethoxyethanol acetate [2-EEA]																
2-Ethoxyethanol [Ethylene glycol monoethyl ether]																
Ethyl acetate					✔											
Ethyl benzene				✔	✔	✔									✔	
Ethyl ether [Diethyl ether]					✔											
Ethyl methacrylate																
Ethyl methanesulfonate																
Ethylene dibromide [1,2-Dibromoethane]						✔										
Ethylene glycol		✔		✔	✔	✔										
Ethylene oxide					✔											

(continued)

Table B-22. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Ethylene thiourea							✔									
Ethylidene dichloride [1,1-Dichloroethane]						✔										
Fluoranthene				✔	✔	✔			✔							
Fluorene					✔	✔			✔							
Fluoride				✔	✔	✔			✔					✔	✔	
Formaldehyde		✔		✔	✔	✔						✔				
Formic Acid				✔	✔											
Furan																
Furfural				✔												
Glycidylaldehyde																
Heptachlor																
Heptachlor epoxide, alpha, beta, and gamma isomers				✔												
Hexachloro-1,3-butadiene [Hexachlorobutadiene]																
Hexachlorobenzene																
alpha-Hexachlorocyclohexane [alpha-BHC]				✔												
Hexachlorocyclopentadiene																
Hexachlorodibenzo-p-dioxins [HxCDDs]				✔												
Hexachlorodibenzofurans [HxCDFs]				✔	✔											
Hexachloroethane																
Hexachlorophene																
n-Hexane				✔												
Hydrazine																
Indeno(1,2,3-cd) pyrene				✔		✔			✔							
Isobutyl alcohol [Isobutanol]					✔											
Isophorone																
Kepone																
Lead		✔		✔	✔	✔	✔	✔	✔	✔					✔	
Lindane [gamma-Hexachlorocyclohexane] [gamma-BHC]																
Maleic anhydride																
Maleic hydrazide																
Manganese	✔			✔	✔	✔			✔	✔				✔		
Mercury				✔	✔	✔			✔	✔						
Methacrylonitrile																
Methanol [methyl alcohol]		✔		✔	✔	✔										
Methomyl																
Methoxychlor				✔												
2-Methoxyethanol acetate [2-MEA] [methyl cellosolve acetate]																
2-Methoxyethanol [methyl cellosolve]																
Methyl ethyl ketone [2-Butanone][MEK]				✔	✔	✔										
Methyl isobutyl ketone [Hexone] [4-Methyl-2-pentanone] [MIBK]				✔												
Methyl methacrylate					✔											
Methyl parathion																

(continued)

Table B-22. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Methyl tert-butyl ether [MTBE]						✔										
3-Methylcholanthrene																
4,4'-Methylene bis(2-chloroaniline)																
Methylene bromide [Dibromomethane]																
Methylene chloride [Dichloromethane]				✔	✔	✔			✔							
Molybdenum				✔	✔	✔	✔		✔					✔		
Naphthalene				✔	✔	✔			✔						✔	
Nickel		✔	✔	✔	✔	✔	✔	✔	✔	✔		✔		✔	✔	
Nickel Subsulfide																
Nitrobenzene																
2-Nitropropane																
N-Nitroso-N-methylethylamine																
N-Nitrosodi-n-butylamine																
N-Nitrosodi-n-propylamine [Di-n-propylnitrosamine]																
N-Nitrosodiethylamine																
N-Nitrosodimethylamine																
N-Nitrosodiphenylamine [Diphenylnitrosamine]						✔										
N-Nitrosopiperidine																
N-Nitrosopyrrolidine																
Octamethylpyrophosphoramide																
Parathion																
Pentachlorobenzene																
Pentachlorodibenzo-p-dioxins [PeCDDs]																
Pentachlorodibenzofurans [PeCDFs]				✔												
Pentachloronitrobenzene [PCNB] [Quintobenzene] [Quintozene]																
Pentachlorophenol [PCP]				✔												
Perchlorate																
Phenol				✔	✔	✔			✔							
1,3-Phenylenediamine [m-Phenylenediamine]																
Phorate																
Phthalic anhydride																
Polychlorinated biphenyls [Aroclors]				✔					✔							
Pronamide																
Propylene oxide [1,2-Epoxypropane]					✔											
Pyrene				✔	✔	✔			✔							
Pyridine					✔	✔										
Safrole																
Selenium				✔	✔	✔		✔	✔	✔						
Silver				✔	✔	✔		✔	✔	✔						
Silvex [2,4,5-Trichlorophenoxypropionic acid]																
Strychnine																
Styrene				✔	✔	✔										
Styrene oxide																
Sulfide	✔	✔		✔	✔	✔			✔							

(continued)

Table B-22. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]				✔												
1,2,4,5-Tetrachlorobenzene																
Tetrachlorodibenzo-p-dioxins [TCDDs]				✔												
Tetrachlorodibenzofurans [TCDFs]				✔												
1,1,1,2-Tetrachloroethane																
1,1,2,2-Tetrachloroethane																
Tetrachloroethylene [Perchloroethylene]						✔			✔							
2,3,4,6-Tetrachlorophenol				✔												
Tetraethyldithiopyrophosphate [Sulfotepp]																
Thallium				✔		✔		✔								
Thiram [Thiuram]							✔									
Toluene				✔	✔	✔									✔	
2,4-Toluenediamine [2,4-Diaminotoluene]																
o-Toluidine																
p-Toluidine																
Toxaphene [Chlorinated camphene]																
1,1,2-Trichloro-1,2,2-trifluoroethane [Freon 113]																
1,2,4-Trichlorobenzene				✔	✔											
1,1,1-Trichloroethane [Methyl chloroform]					✔	✔										
1,1,2-Trichloroethane [Vinyl trichloride]					✔											
Trichloroethylene [TCE]						✔										
Trichlorofluoromethane [Trichloromonofluoromethane] [CFC-11]																
2,4,5-Trichlorophenol				✔												
2,4,6-Trichlorophenol				✔	✔											
2,4,5-Trichlorophenoxyacetic acid [2,4,5,-T]																
1,2,3-Trichloropropane																
Triethylamine					✔											
1,3,5-Trinitrobenzene [sym-Trinitrobenzene]																
Tris(2,3-dibromopropyl) phosphate																
Vanadium				✔	✔	✔		✔						✔		
Vinyl acetate		✔			✔											
Vinyl chloride [chloroethylene]					✔											
Warfarin																
m-Xylene				✔	✔											
o-Xylene				✔	✔											
p-Xylene				✔	✔											
Xylenes, mixed isomers [Xylenes]				✔	✔	✔									✔	
Zinc	✔	✔		✔	✔	✔	✔	✔	✔	✔		✔		✔	✔	

Table B-23. Chemical Presence in Wastewater in Impoundment by SIC Code (Survey Database)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Acenaphthene						✔										
Acetaldehyde [Ethanal]				✔	✔											
Acetone [2-Propanone]				✔	✔	✔			✔							
Acetonitrile [Methyl cyanide]					✔											
Acetophenone																
Acrolein [2-propenal]					✔											
Acrylamide																
Acrylic acid [propenoic acid]					✔											
Acrylonitrile					✔											
Aldicarb																
Aldrin																
Allyl alcohol					✔											
Allyl chloride					✔											
Ammonium vanadate																
Ammonium perchlorate																
Aniline				✔	✔											
Anthracene						✔										
Antimony				✔	✔	✔			✔	✔						
Aramite																
Arsenic				✔	✔	✔		✔	✔	✔				✔		
Barium		✔		✔	✔	✔	✔	✔	✔	✔		✔			✔	
Benzene					✔	✔			✔						✔	
Benzidine																
Benzo(a)pyrene						✔			✔							
Benzo(b)fluoranthene						✔			✔							
Benzo[a]anthracene						✔			✔							
Benzyl alcohol				✔	✔											
Benzyl chloride																
Beryllium				✔	✔	✔			✔					✔		
beta-Hexachlorocyclohexane [beta-BHC]				✔												
Bis(2-chloroethyl) ether [sym-Dichloroethyl ether]																
Bis(2-chloroisopropyl) ether [2,2'-Dichloroisopropyl ether]					✔											
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]		✔		✔	✔	✔	✔									
Bis(chloromethyl) ether [sym-Dichloromethyl ether]																
Bromodichloromethane [Dichlorobromomethane]					✔		✔		✔							
Bromoform [Tribromomethane]					✔		✔									
Bromomethane [Methyl bromide]					✔											
1,3-Butadiene																
n-Butyl alcohol [n-Butanol]					✔											
Butyl benzyl phthalate																
Cadmium		✔		✔	✔	✔	✔	✔	✔	✔				✔		
Carbon disulfide				✔	✔	✔										

(continued)

Table B-23. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Carbon tetrachloride					✔											
Chloral [Trichloroacetaldehyde]																
Chloral hydrate [Trichloroacetaldehyde hydrate]																
Chlordane, alpha & gamma isomers		✔														
4-Chloroaniline [p-aminochlorobenzene]																
Chlorobenzene						✔										
Chlorobenzilate																
Chlorodibromomethane [Dibromochloromethane]				✔	✔		✔									
Chloroethane [Ethyl chloride]					✔											
Chloroform [Trichloromethane]				✔	✔	✔	✔		✔							
Chloromethane [Methyl chloride]				✔	✔											
Chloromethyl methyl ether																
2-Chloronaphthalene [beta-Chloronaphthalene]																
2-Chlorophenol [o-Chlorophenol]				✔												
Chloroprene [2-Chloro-1,3-butadiene]					✔											
Chromium		✔		✔	✔	✔		✔	✔	✔		✔		✔	✔	
Chromium VI [Hexavalent Chromium]					✔	✔			✔	✔						
Chrysene						✔										
Cobalt				✔	✔	✔										
Copper		✔		✔	✔	✔	✔		✔	✔		✔		✔	✔	
m-Cresol [3-Methyl phenol]		✔				✔										
o-Cresol [2-Methyl phenol]		✔				✔										
p-Cresol [4-Methyl phenol]		✔				✔										
Cresols				✔												
Cumene [Isopropyl benzene]				✔												
Cyanide		✔		✔	✔	✔			✔							
Cyanide, amenable					✔	✔			✔							
Cyanogen bromide [Bromine cyanide]																
Cyanogen chloride [Chlorine cyanide]																
Cyclohexanol																
Cyclohexanone				✔												
2,4-D [2,4-Dichlorophenoxyacetic acid]		✔														
p,p'-DDD																
p,p'-DDE																
p,p'-DDT																
Di-n-butyl phthalate						✔	✔									
Diallate																
Dibenz[a,h]anthracene						✔										
1,2-Dibromo-3-chloropropane																
1,2-Dichlorobenzene [o-Dichlorobenzene]					✔	✔										
1,4-Dichlorobenzene [p-Dichlorobenzene]		✔				✔										
3,3'-Dichlorobenzidine																
Dichlorodifluoromethane [CFC-12]																
1,2-Dichloroethane [Ethylene dichloride]					✔	✔										

(continued)

Table B-23. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
1,1-Dichloroethylene [Vinylidene chloride]					✔											
cis-1,2-Dichloroethylene																
trans-1,2-Dichloroethylene																
2,4-Dichlorophenol				✔												
1,2-Dichloropropane [Propylene dichloride]					✔											
cis-1,3-Dichloropropylene																
trans-1,3-Dichloropropylene																
Dieldrin																
Diethyl phthalate [DEP]					✔	✔										
Diethylstilbestrol [DES]																
Dimethoate																
3,3'-Dimethoxybenzidine																
N,N-Dimethyl formamide [DMF]					✔	✔										
Dimethyl phthalate [DMP]						✔										
7,12-Dimethylbenz[a]anthracene																
3,3'-Dimethylbenzidine																
2,4-Dimethylphenol						✔										
3,4-Dimethylphenol																
1,3-Dinitrobenzene [m-Dinitrobenzene]																
2,4-Dinitrophenol						✔										
2,4-Dinitrotoluene		✔														
2,6-Dinitrotoluene																
Dinoseb [2-sec-Butyl-4,6-dinitrophenol]																
n-Dioctyl phthalate					✔		✔									
1,4-Dioxane [1,4-Diethyleneoxide]					✔	✔										
Diphenylamine																
1,2-Diphenylhydrazine																
Direct Black 38																
Direct Blue 6																
Direct Brown 95																
Disulfoton																
Endosulfan																
Endothall																
Endrin		✔														
Epichlorohydrin [1-Chloro-2,3-epoxypropane]		✔			✔											
1,2-Epoxybutane [1,2-Butylene oxide]																
2-Ethoxyethanol acetate [2-EEA]																
2-Ethoxyethanol [Ethylene glycol monoethyl ether]																
Ethyl acetate					✔											
Ethyl benzene				✔	✔	✔									✔	
Ethyl ether [Diethyl ether]					✔											
Ethyl methacrylate																
Ethyl methanesulfonate																
Ethylene dibromide [1,2-Dibromoethane]						✔										

(continued)

Table B-23. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Ethylene glycol		✔		✔	✔	✔										
Ethylene oxide					✔											
Ethylene thiourea							✔									
Ethylidene dichloride [1,1-Dichloroethane]						✔			✔							
Fluoranthene						✔			✔							
Fluorene						✔										
Fluoride				✔	✔	✔			✔					✔	✔	
Formaldehyde		✔		✔	✔	✔						✔				
Formic Acid				✔	✔											
Furan																
Furfural																
Glycidylaldehyde																
Heptachlor		✔														
Heptachlor epoxide, alpha, beta, and gamma isomers		✔		✔												
Hexachloro-1,3-butadiene [Hexachlorobutadiene]																
Hexachlorobenzene					✔											
alpha-Hexachlorocyclohexane [alpha-BHC]				✔												
Hexachlorocyclopentadiene																
Hexachlorodibenzo-p-dioxins [HxCDDs]																
Hexachlorodibenzofurans [HxCDFs]					✔											
Hexachloroethane																
Hexachlorophene																
n-Hexane				✔												
Hydrazine																
Indeno(1,2,3-cd) pyrene						✔										
Isobutyl alcohol [Isobutanol]																
Isophorone																
Kepone																
Lead		✔		✔	✔	✔	✔	✔	✔	✔				✔	✔	
Lindane [gamma-Hexachlorocyclohexane] [gamma-BHC]		✔														
Maleic anhydride																
Maleic hydrazide																
Manganese	✔			✔	✔	✔			✔	✔				✔		
Mercury				✔	✔	✔		✔	✔	✔						
Methacrylonitrile																
Methanol [methyl alcohol]		✔		✔	✔	✔										
Methomyl																
Methoxychlor		✔		✔												
2-Methoxyethanol acetate [2-MEA] [methyl cellosolve acetate]																
2-Methoxyethanol [methyl cellosolve]																
Methyl ethyl ketone [2-Butanone][MEK]				✔	✔	✔										
Methyl isobutyl ketone [Hexone] [4-Methyl-2-pentanone] [MIBK]				✔												

(continued)

Table B-23. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Methyl methacrylate					✔											
Methyl parathion																
Methyl tert-butyl ether [MTBE]					✔	✔										
3-Methylcholanthrene																
4,4'-Methylene bis(2-chloroaniline)																
Methylene bromide [Dibromomethane]																
Methylene chloride [Dichloromethane]				✔	✔	✔			✔							
Molybdenum				✔	✔	✔	✔		✔					✔		
Naphthalene				✔	✔	✔			✔						✔	
Nickel		✔		✔	✔	✔	✔	✔	✔	✔		✔		✔	✔	
Nickel Subsulfide																
Nitrobenzene																
2-Nitropropane																
N-Nitroso-N-methylethylamine																
N-Nitrosodi-n-butylamine																
N-Nitrosodi-n-propylamine [Di-n-propylnitrosamine]																
N-Nitrosodiethylamine																
N-Nitrosodimethylamine																
N-Nitrosodiphenylamine [Diphenylnitrosamine]						✔										
N-Nitrosopiperidine																
N-Nitrosopyrrolidine																
Octamethylpyrophosphoramide																
Parathion																
Pentachlorobenzene																
Pentachlorodibenzo-p-dioxins [PeCDDs]																
Pentachlorodibenzofurans [PeCDFs]																
Pentachloronitrobenzene [PCNB] [Quintobenzene] [Quintozene]																
Pentachlorophenol [PCP]				✔												
Perchlorate																
Phenol				✔	✔	✔			✔							
1,3-Phenylenediamine [m-Phenylenediamine]																
Phorate																
Phthalic anhydride																
Polychlorinated biphenyls [Aroclors]				✔					✔							
Pronamide																
Propylene oxide [1,2-Epoxypropane]					✔											
Pyrene						✔			✔							
Pyridine					✔	✔										
Safrole																
Selenium				✔	✔	✔		✔	✔	✔						
Silver				✔	✔	✔		✔	✔	✔						
Silvex [2,4,5-Trichlorophenoxypropionic acid]		✔														

(continued)

Table B-23. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Strychnine																
Styrene					✔	✔										
Styrene oxide																
Sulfide	✔	✔		✔	✔	✔			✔							
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]				✔												
1,2,4,5-Tetrachlorobenzene																
Tetrachlorodibenzo-p-dioxins [TCDDs]				✔												
Tetrachlorodibenzofurans [TCDFs]				✔												
1,1,1,2-Tetrachloroethane																
1,1,2,2-Tetrachloroethane																
Tetrachloroethylene [Perchloroethylene]						✔			✔							
2,3,4,6-Tetrachlorophenol				✔												
Tetraethyldithiopyrophosphate [Sulfotepp]																
Thallium				✔		✔										
Thiram [Thiuram]							✔									
Toluene				✔	✔	✔									✔	
2,4-Toluenediamine [2,4-Diaminotoluene]																
o-Toluidine																
p-Toluidine																
Toxaphene [Chlorinated camphene]		✔														
1,1,2-Trichloro-1,2,2-trifluoroethane [Freon 113]																
1,2,4-Trichlorobenzene				✔												
1,1,1-Trichloroethane [Methyl chloroform]						✔			✔							
1,1,2-Trichloroethane [Vinyl trichloride]																
Trichloroethylene [TCE]						✔			✔							
Trichlorofluoromethane [Trichloromonofluoromethane] [CFC-11]																
2,4,5-Trichlorophenol		✔		✔												
2,4,6-Trichlorophenol		✔		✔												
2,4,5-Trichlorophenoxyacetic acid [2,4,5,-T]																
1,2,3-Trichloropropane																
Triethylamine					✔											
1,3,5-Trinitrobenzene [sym-Trinitrobenzene]																
Tris(2,3-dibromopropyl) phosphate																
Vanadium				✔	✔	✔		✔						✔		
Vinyl acetate		✔														
Vinyl chloride [chloroethylene]																
Warfarin																
m-Xylene				✔	✔											
o-Xylene				✔	✔											
p-Xylene				✔	✔											
Xylenes, mixed isomers [Xylenes]				✔	✔	✔									✔	
Zinc	✔	✔		✔	✔	✔	✔		✔	✔		✔		✔	✔	

Table B-24. Chemical Presence in Wastewater Effluent by SIC Code (Survey Database)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Acenaphthene						✔			✔							
Acetaldehyde [Ethanal]				✔	✔											
Acetone [2-Propanone]				✔	✔	✔										
Acetonitrile [Methyl cyanide]																
Acetophenone																
Acrolein [2-propenal]					✔											
Acrylamide																
Acrylic acid [propenoic acid]					✔											
Acrylonitrile					✔											
Aldicarb																
Aldrin																
Allyl alcohol					✔											
Allyl chloride					✔											
Ammonium vanadate																
Ammonium perchlorate																
Aniline				✔												
Anthracene						✔			✔							
Antimony				✔	✔	✔			✔	✔						
Aramite																
Arsenic				✔	✔	✔			✔							
Barium		✔		✔	✔	✔	✔	✔	✔			✔		✔	✔	
Benzene					✔	✔			✔						✔	
Benzidine																
Benzo(a)pyrene						✔			✔							
Benzo(b)fluoranthene						✔			✔							
Benzo[a]anthracene						✔			✔							
Benzyl alcohol				✔	✔	✔										
Benzyl chloride																
Beryllium				✔		✔		✔	✔							
beta-Hexachlorocyclohexane [beta-BHC]				✔												
Bis(2-chloroethyl) ether [sym-Dichloroethyl ether]					✔											
Bis(2-chloroisopropyl) ether [2,2'-Dichloroisopropyl ether]					✔											
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]		✔		✔	✔	✔	✔									
Bis(chloromethyl) ether [sym-Dichloromethyl ether]																
Bromodichloromethane [Dichlorobromomethane]					✔		✔									

(continued)

Table B-24. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Bromoform [Tribromomethane]					✔	✔										
Bromomethane [Methyl bromide]					✔											
1,3-Butadiene																
n-Butyl alcohol [n-Butanol]					✔											
Butyl benzyl phthalate																
Cadmium		✔		✔	✔	✔	✔	✔	✔							
Carbon disulfide				✔	✔	✔										
Carbon tetrachloride					✔											
Chloral [Trichloroacetaldehyde]																
Chloral hydrate [Trichloroacetaldehyde hydrate]																
Chlordane, alpha & gamma isomers																
4-Chloroaniline [p-aminochlorobenzene]																
Chlorobenzene						✔										
Chlorobenzilate																
Chlorodibromomethane [Dibromochloromethane]					✔		✔									
Chloroethane [Ethyl chloride]					✔											
Chloroform [Trichloromethane]				✔	✔	✔	✔		✔							
Chloromethane [Methyl chloride]				✔	✔				✔							
Chloromethyl methyl ether																
2-Chloronaphthalene [beta-Chloronaphthalene]																
2-Chlorophenol [o-Chlorophenol]				✔												
Chloroprene [2-Chloro-1,3-butadiene]					✔											
Chromium		✔		✔	✔	✔		✔	✔			✔		✔	✔	
Chromium VI [Hexavalent Chromium]					✔	✔			✔							
Chrysene						✔			✔							
Cobalt				✔	✔	✔										
Copper		✔		✔	✔	✔	✔		✔	✔		✔	✔	✔	✔	
m-Cresol [3-Methyl phenol]						✔										
o-Cresol [2-Methyl phenol]						✔										
p-Cresol [4-Methyl phenol]						✔										
Cresols				✔		✔										
Cumene [Isopropyl benzene]				✔												
Cyanide		✔		✔	✔	✔			✔					✔		
Cyanide, amenable					✔	✔			✔							
Cyanogen bromide [Bromine cyanide]																
Cyanogen chloride [Chlorine cyanide]																

(continued)

Table B-24. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Cyclohexanol																
Cyclohexanone				✔												
2,4-D [2,4-Dichlorophenoxyacetic acid]																
p,p'-DDD																
p,p'-DDE																
p,p'-DDT																
Di-n-butyl phthalate						✔	✔									
Diallate																
Dibenz[a,h]anthracene						✔			✔							
1,2-Dibromo-3-chloropropane																
1,2-Dichlorobenzene [o-Dichlorobenzene]					✔	✔										
1,4-Dichlorobenzene [p-Dichlorobenzene]						✔										
3,3'-Dichlorobenzidine																
Dichlorodifluoromethane [CFC-12]																
1,2-Dichloroethane [Ethylene dichloride]					✔	✔										
1,1-Dichloroethylene [Vinylidene chloride]					✔											
cis-1,2-Dichloroethylene																
trans-1,2-Dichloroethylene																
2,4-Dichlorophenol				✔												
1,2-Dichloropropane [Propylene dichloride]					✔											
cis-1,3-Dichloropropylene																
trans-1,3-Dichloropropylene																
Dieldrin																
Diethyl phthalate [DEP]						✔										
Diethylstilbestrol [DES]																
Dimethoate																
3,3'-Dimethoxybenzidine																
N,N-Dimethyl formamide [DMF]						✔										
Dimethyl phthalate [DMP]						✔										
7,12-Dimethylbenz[a]anthracene																
3,3'-Dimethylbenzidine																
2,4-Dimethylphenol						✔										
3,4-Dimethylphenol																
1,3-Dinitrobenzene [m-Dinitrobenzene]																
2,4-Dinitrophenol						✔										

(continued)

Table B-24. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
2,4-Dinitrotoluene																
2,6-Dinitrotoluene					✔											
Dinoseb [2-sec-Butyl-4,6-dinitrophenol]																
n-Dioctyl phthalate					✔		✔									
1,4-Dioxane [1,4-Diethyleneoxide]					✔	✔										
Diphenylamine																
1,2-Diphenylhydrazine																
Direct Black 38																
Direct Blue 6																
Direct Brown 95																
Disulfoton																
Endosulfan																
Endothall																
Endrin																
Epichlorohydrin [1-Chloro-2,3-epoxypropane]		✔			✔											
1,2-Epoxybutane [1,2-Butylene oxide]																
2-Ethoxyethanol acetate [2-EEA]																
2-Ethoxyethanol [Ethylene glycol monoethyl ether]																
Ethyl acetate																
Ethyl benzene				✔	✔	✔									✔	
Ethyl ether [Diethyl ether]																
Ethyl methacrylate																
Ethyl methanesulfonate																
Ethylene dibromide [1,2-Dibromoethane]						✔										
Ethylene glycol		✔		✔	✔	✔										
Ethylene oxide					✔											
Ethylene thiourea							✔									
Ethylidene dichloride [1,1-Dichloroethane]						✔										
Fluoranthene						✔			✔							
Fluorene						✔			✔							
Fluoride				✔	✔	✔			✔			✔				
Formaldehyde		✔		✔	✔	✔										
Formic Acid				✔	✔											
Furan																
Furfural				✔												
Glycidylaldehyde																

(continued)

Table B-24. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Heptachlor																
Heptachlor epoxide, alpha, beta, and gamma isomers				✔												
Hexachloro-1,3-butadiene [Hexachlorobutadiene]																
Hexachlorobenzene																
alpha-Hexachlorocyclohexane [alpha-BHC]				✔												
Hexachlorocyclopentadiene																
Hexachlorodibenzo-p-dioxins [HxCDDs]				✔												
Hexachlorodibenzofurans [HxCDFs]				✔	✔											
Hexachloroethane																
Hexachlorophene																
n-Hexane				✔												
Hydrazine																
Indeno(1,2,3-cd) pyrene						✔			✔							
Isobutyl alcohol [Isobutanol]																
Isophorone																
Kepone																
Lead		✔		✔	✔	✔	✔		✔	✔				✔	✔	
Lindane [gamma-Hexachlorocyclohexane] [gamma-BHC]																
Maleic anhydride																
Maleic hydrazide																
Manganese	✔			✔	✔	✔			✔	✔		✔		✔		
Mercury				✔	✔	✔			✔					✔		
Methacrylonitrile																
Methanol [methyl alcohol]		✔		✔	✔	✔										
Methomyl																
Methoxychlor																
2-Methoxyethanol acetate [2-MEA] [methyl cellosolve acetate]																
2-Methoxyethanol [methyl cellosolve]																
Methyl ethyl ketone [2-Butanone][MEK]				✔	✔	✔										
Methyl isobutyl ketone [Hexone] [4-Methyl-2-pentanone] [MIBK]				✔												
Methyl methacrylate					✔											
Methyl parathion																
Methyl tert-butyl ether [MTBE]						✔										
3-Methylcholanthrene																

(continued)

Table B-24. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
4,4'-Methylene bis(2-chloroaniline)																
Methylene bromide [Dibromomethane]																
Methylene chloride [Dichloromethane]				✔	✔	✔			✔							
Molybdenum				✔	✔	✔	✔		✔			✔				
Naphthalene				✔	✔	✔			✔						✔	
Nickel		✔		✔	✔	✔	✔	✔	✔			✔			✔	
Nickel Subsulfide																
Nitrobenzene																
2-Nitropropane																
N-Nitroso-N-methylethylamine																
N-Nitrosodi-n-butylamine																
N-Nitrosodi-n-propylamine [Di-n-propylnitrosamine]																
N-Nitrosodiethylamine																
N-Nitrosodimethylamine																
N-Nitrosodiphenylamine [Diphenylnitrosamine]						✔										
N-Nitrosopiperidine																
N-Nitrosopyrrolidine																
Octamethylpyrophosphoramide																
Parathion																
Pentachlorobenzene																
Pentachlorodibenzo-p-dioxins [PeCDDs]																
Pentachlorodibenzofurans [PeCDFs]				✔												
Pentachloronitrobenzene [PCNB] [Quintobenzene] [Quintozene]																
Pentachlorophenol [PCP]				✔					✔							
Perchlorate																
Phenol				✔	✔	✔			✔					✔		
1,3-Phenylenediamine [m-Phenylenediamine]																
Phorate																
Phthalic anhydride																
Polychlorinated biphenyls [Aroclors]				✔					✔							
Pronamide																
Propylene oxide [1,2-Epoxypropane]					✔											
Pyrene						✔			✔							
Pyridine						✔										
Safrole																

(continued)

Table B-24. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Selenium				✔	✔	✔			✔							
Silver				✔		✔		✔	✔							
Silvex [2,4,5-Trichlorophenoxypropionic acid]																
Strychnine																
Styrene				✔	✔	✔										
Styrene oxide																
Sulfide		✔		✔	✔	✔			✔							
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]				✔												
1,2,4,5-Tetrachlorobenzene																
Tetrachlorodibenzo-p-dioxins [TCDDs]				✔												
Tetrachlorodibenzofurans [TCDFs]				✔												
1,1,1,2-Tetrachloroethane																
1,1,2,2-Tetrachloroethane																
Tetrachloroethylene [Perchloroethylene]						✔			✔							
2,3,4,6-Tetrachlorophenol				✔												
Tetraethyldithiopyrophosphate [Sulfotepp]																
Thallium				✔		✔		✔								
Thiram [Thiuram]							✔									
Toluene				✔	✔	✔									✔	
2,4-Toluenediamine [2,4-Diaminotoluene]																
o-Toluidine																
p-Toluidine																
Toxaphene [Chlorinated camphene]																
1,1,2-Trichloro-1,2,2-trifluoroethane [Freon 113]																
1,2,4-Trichlorobenzene																
1,1,1-Trichloroethane [Methyl chloroform]						✔										
1,1,2-Trichloroethane [Vinyl trichloride]																
Trichloroethylene [TCE]						✔										
Trichlorofluoromethane [Trichloromonofluoromethane] [CFC-11]																
2,4,5-Trichlorophenol				✔												
2,4,6-Trichlorophenol				✔												
2,4,5-Trichlorophenoxyacetic acid [2,4,5,-T]																
1,2,3-Trichloropropane																

(continued)

Table B-24. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Triethylamine																
1,3,5-Trinitrobenzene [sym-Trinitrobenzene]																
Tris(2,3-dibromopropyl) phosphate																
Vanadium				✔	✔	✔		✔								
Vinyl acetate		✔														
Vinyl chloride [chloroethylene]																
Warfarin																
m-Xylene				✔	✔											
o-Xylene				✔	✔											
p-Xylene				✔	✔											
Xylenes, mixed isomers [Xylenes]				✔	✔	✔									✔	
Zinc	✔	✔		✔	✔	✔	✔	✔	✔	✔		✔				

Table B-25. Chemical Presence in Sludge by SIC Code (Survey Database)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Acenaphthene					✔	✔										
Acetaldehyde [Ethanal]				✔	✔											
Acetone [2-Propanone]				✔	✔	✔			✔							
Acetonitrile [Methyl cyanide]																
Acetophenone																
Acrolein [2-propenal]					✔											
Acrylamide																
Acrylic acid [propenoic acid]					✔											
Acrylonitrile					✔											
Aldicarb																
Aldrin					✔											
Allyl alcohol					✔											
Allyl chloride																
Ammonium vanadate																
Ammonium perchlorate																
Aniline																
Anthracene					✔	✔										
Antimony				✔	✔	✔		✔	✔	✔				✔		
Aramite																
Arsenic	✔			✔	✔	✔			✔					✔		✔
Barium	✔			✔	✔	✔	✔	✔	✔	✔		✔		✔		✔
Benzene					✔	✔			✔							
Benzidine																
Benzo(a)pyrene					✔	✔			✔							
Benzo(b)fluoranthene					✔	✔			✔							
Benzo[a]anthracene					✔	✔			✔							
Benzyl alcohol																
Benzyl chloride																
Beryllium				✔	✔	✔		✔	✔					✔		
beta-Hexachlorocyclohexane [beta-BHC]					✔											
Bis(2-chloroethyl) ether [sym-Dichloroethyl ether]					✔											
Bis(2-chloroisopropyl) ether [2,2'-Dichloroisopropyl ether]					✔											
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]					✔	✔	✔									
Bis(chloromethyl) ether [sym-Dichloromethyl ether]																
Bromodichloromethane [Dichlorobromomethane]																

(continued)

Table B-25. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Bromoform [Tribromomethane]					✔											
Bromomethane [Methyl bromide]									✔							
1,3-Butadiene																
n-Butyl alcohol [n-Butanol]					✔											
Butyl benzyl phthalate					✔											
Cadmium	✔			✔	✔	✔	✔	✔	✔	✔				✔		✔
Carbon disulfide				✔	✔	✔			✔							
Carbon tetrachloride																
Chloral [Trichloroacetaldehyde]																
Chloral hydrate [Trichloroacetaldehyde hydrate]																
Chlordane, alpha & gamma isomers					✔											
4-Chloroaniline [p-aminochlorobenzene]																
Chlorobenzene					✔	✔										
Chlorobenzilate																
Chlorodibromomethane [Dibromochloromethane]																
Chloroethane [Ethyl chloride]																
Chloroform [Trichloromethane]				✔	✔	✔			✔							
Chloromethane [Methyl chloride]				✔					✔							
Chloromethyl methyl ether																
2-Chloronaphthalene [beta-Chloronaphthalene]																
2-Chlorophenol [o-Chlorophenol]				✔	✔											
Chloroprene [2-Chloro-1,3-butadiene]																
Chromium	✔	✔		✔	✔	✔		✔	✔	✔		✔		✔	✔	✔
Chromium VI [Hexavalent Chromium]					✔	✔			✔							
Chrysene					✔	✔			✔							
Cobalt				✔	✔	✔			✔							✔
Copper	✔	✔		✔	✔	✔	✔		✔	✔		✔		✔		✔
m-Cresol [3-Methyl phenol]				✔	✔	✔										
o-Cresol [2-Methyl phenol]					✔	✔										
p-Cresol [4-Methyl phenol]					✔	✔										
Cresols				✔												
Cumene [Isopropyl benzene]				✔												
Cyanide					✔	✔			✔							
Cyanide, amenable									✔							
Cyanogen bromide [Bromine cyanide]																

(continued)

Table B-25. (continued)

Industry Group / Chemical	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Cyanogen chloride [Chlorine cyanide]																
Cyclohexanol																
Cyclohexanone																
2,4-D [2,4-Dichlorophenoxyacetic acid]																
p,p'-DDD					✔											
p,p'-DDE					✔											
p,p'-DDT					✔											
Di-n-butyl phthalate					✔	✔	✔									
Diallate																
Dibenz[a,h]anthracene						✔			✔							
1,2-Dibromo-3-chloropropane																
1,2-Dichlorobenzene [o-Dichlorobenzene]					✔	✔										
1,4-Dichlorobenzene [p-Dichlorobenzene]					✔	✔										
3,3'-Dichlorobenzidine																
Dichlorodifluoromethane [CFC-12]																
1,2-Dichloroethane [Ethylene dichloride]					✔	✔										
1,1-Dichloroethylene [Vinylidene chloride]					✔											
cis-1,2-Dichloroethylene																
trans-1,2-Dichloroethylene																
2,4-Dichlorophenol				✔	✔											
1,2-Dichloropropane [Propylene dichloride]					✔											
cis-1,3-Dichloropropylene																
trans-1,3-Dichloropropylene																
Dieldrin					✔											
Diethyl phthalate [DEP]						✔										
Diethylstilbestrol [DES]																
Dimethoate																
3,3'-Dimethoxybenzidine																
N,N-Dimethyl formamide [DMF]						✔										
Dimethyl phthalate [DMP]						✔										
7,12-Dimethylbenz[a]anthracene																
3,3'-Dimethylbenzidine																
2,4-Dimethylphenol					✔	✔										
3,4-Dimethylphenol																
1,3-Dinitrobenzene [m-Dinitrobenzene]																

(continued)

Table B-25. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
2,4-Dinitrophenol						✔										
2,4-Dinitrotoluene																
2,6-Dinitrotoluene																
Dinoseb [2-sec-Butyl-4,6-dinitrophenol]																
n-Dioctyl phthalate					✔		✔									
1,4-Dioxane [1,4-Diethyleneoxide]					✔	✔										
Diphenylamine																
1,2-Diphenylhydrazine																
Direct Black 38																
Direct Blue 6																
Direct Brown 95																
Disulfoton																
Endosulfan																
Endothall																
Endrin					✔											
Epichlorohydrin [1-Chloro-2,3-epoxypropane]																
1,2-Epoxybutane [1,2-Butylene oxide]																
2-Ethoxyethanol acetate [2-EEA]																
2-Ethoxyethanol [Ethylene glycol monoethyl ether]																
Ethyl acetate																
Ethyl benzene					✔	✔										
Ethyl ether [Diethyl ether]																
Ethyl methacrylate																
Ethyl methanesulfonate																
Ethylene dibromide [1,2-Dibromoethane]						✔										
Ethylene glycol				✔	✔	✔										
Ethylene oxide					✔											
Ethylene thiourea							✔									
Ethylidene dichloride [1,1-Dichloroethane]						✔										
Fluoranthene					✔	✔			✔							
Fluorene					✔	✔										
Fluoride				✔	✔	✔			✔					✔		
Formaldehyde				✔	✔	✔						✔				
Formic Acid					✔											
Furan																

(continued)

Table B-25. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Furfural																
Glycidylaldehyde																
Heptachlor					✔											
Heptachlor epoxide, alpha, beta, and gamma isomers					✔											
Hexachloro-1,3-butadiene [Hexachlorobutadiene]																
Hexachlorobenzene					✔											
alpha-Hexachlorocyclohexane [alpha-BHC]																
Hexachlorocyclopentadiene																
Hexachlorodibenzo-p-dioxins [HxCDDs]				✔												
Hexachlorodibenzofurans [HxCDFs]				✔	✔											
Hexachloroethane																
Hexachlorophene																
n-Hexane				✔												
Hydrazine																
Indeno(1,2,3-cd) pyrene						✔			✔							
Isobutyl alcohol [Isobutanol]																
Isophorone					✔											
Kepone																
Lead	✔	✔		✔	✔	✔	✔	✔	✔	✔		✔		✔		
Lindane [gamma-Hexachlorocyclohexane] [gamma-BHC]					✔											
Maleic anhydride																
Maleic hydrazide																
Manganese				✔	✔	✔			✔	✔				✔		✔
Mercury				✔	✔	✔			✔					✔		
Methacrylonitrile																
Methanol [methyl alcohol]				✔	✔	✔										
Methomyl																
Methoxychlor					✔											
2-Methoxyethanol acetate [2-MEA] [methyl cellosolve acetate]																
2-Methoxyethanol [methyl cellosolve]																
Methyl ethyl ketone [2-Butanone][MEK]				✔	✔	✔			✔							
Methyl isobutyl ketone [Hexone] [4-Methyl-2-pentanone] [MIBK]				✔												
Methyl methacrylate																
Methyl parathion																

(continued)

Table B-25. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Methyl tert-butyl ether [MTBE]						✔										
3-Methylcholanthrene																
4,4'-Methylene bis(2-chloroaniline)																
Methylene bromide [Dibromomethane]																
Methylene chloride [Dichloromethane]				✔	✔	✔			✔							
Molybdenum	✔			✔	✔	✔	✔		✔					✔		✔
Naphthalene				✔	✔	✔			✔							
Nickel	✔	✔		✔	✔	✔	✔	✔	✔			✔		✔		✔
Nickel Subsulfide																
Nitrobenzene																
2-Nitropropane																
N-Nitroso-N-methylethylamine																
N-Nitrosodi-n-butylamine																
N-Nitrosodi-n-propylamine [Di-n-propylnitrosamine]																
N-Nitrosodiethylamine																
N-Nitrosodimethylamine																
N-Nitrosodiphenylamine [Diphenylnitrosamine]						✔										
N-Nitrosopiperidine																
N-Nitrosopyrrolidine																
Octamethylpyrophosphoramide																
Parathion																
Pentachlorobenzene																
Pentachlorodibenzo-p-dioxins [PeCDDs]				✔												
Pentachlorodibenzofurans [PeCDFs]				✔												
Pentachloronitrobenzene [PCNB] [Quintobenzene] [Quintozene]																
Pentachlorophenol [PCP]				✔												
Perchlorate																
Phenol				✔	✔	✔			✔							
1,3-Phenylenediamine [m-Phenylenediamine]																
Phorate																
Phthalic anhydride																
Polychlorinated biphenyls [Aroclors]				✔	✔				✔							✔
Pronamide																
Propylene oxide [1,2-Epoxypropane]																
Pyrene					✔	✔			✔							

(continued)

Table B-25. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Pyridine						✔										
Safrole																
Selenium		✔		✔	✔	✔		✔	✔					✔		✔
Silver				✔	✔	✔		✔	✔					✔		
Silvex [2,4,5-Trichlorophenoxypropionic acid]																
Strychnine																
Styrene					✔	✔										
Styrene oxide																
Sulfide				✔	✔	✔			✔			✔				
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]				✔												
1,2,4,5-Tetrachlorobenzene																
Tetrachlorodibenzo-p-dioxins [TCDDs]				✔												
Tetrachlorodibenzofurans [TCDFs]				✔												
1,1,1,2-Tetrachloroethane																
1,1,2,2-Tetrachloroethane																
Tetrachloroethylene [Perchloroethylene]					✔	✔			✔							
2,3,4,6-Tetrachlorophenol				✔												
Tetraethyldithiopyrophosphate [Sulfotepp]																
Thallium				✔	✔	✔		✔								
Thiram [Thiuram]							✔									
Toluene				✔	✔	✔										
2,4-Toluenediamine [2,4-Diaminotoluene]																
o-Toluidine																
p-Toluidine																
Toxaphene [Chlorinated camphene]																
1,1,2-Trichloro-1,2,2-trifluoroethane [Freon 113]																
1,2,4-Trichlorobenzene				✔												
1,1,1-Trichloroethane [Methyl chloroform]						✔										
1,1,2-Trichloroethane [Vinyl trichloride]																
Trichloroethylene [TCE]					✔	✔			✔							
Trichlorofluoromethane [Trichloromonofluoromethane] [CFC-11]																
2,4,5-Trichlorophenol																
2,4,6-Trichlorophenol				✔	✔											

(continued)

Table B-25. (continued)

Industry Group / Chemical	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
2,4,5-Trichlorophenoxyacetic acid [2,4,5,-T]																
1,2,3-Trichloropropane																
Triethylamine																
1,3,5-Trinitrobenzene [sym-Trinitrobenzene]																
Tris(2,3-dibromopropyl) phosphate																
Vanadium				✔	✔	✔		✔	✔					✔		✔
Vinyl acetate																
Vinyl chloride [chloroethylene]					✔											
Warfarin																
m-Xylene																
o-Xylene					✔											
p-Xylene																
Xylenes, mixed isomers [Xylenes]					✔	✔										
Zinc	✔	✔		✔	✔	✔	✔	✔	✔	✔		✔		✔		✔

Table B-26.Chemical Presence in Wastewater Influent by SIC Code (Risk Input Database)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Acenaphthene				✔	✔	✔			✔			✔				
Acetaldehyde [Ethanal]				✔	✔											
Acetone [2-Propanone]				✔	✔	✔			✔							
Acetonitrile [Methyl cyanide]					✔											
Acetophenone					✔											
Acrolein [2-propenal]				✔	✔	✔			✔							
Acrylamide																
Acrylic acid [propenoic acid]					✔											
Acrylonitrile				✔	✔	✔			✔							
Aldicarb																
Aldrin				✔	✔	✔			✔							
Allyl alcohol					✔											
Allyl chloride					✔											
Ammonium vanadate																
Ammonium perchlorate																
Aniline				✔	✔	✔										
Anthracene				✔	✔	✔			✔			✔				
Antimony				✔	✔	✔		✔	✔	✔			✔	✔		
Aramite																
Arsenic		✔		✔	✔	✔		✔	✔	✔		✔		✔		
Barium		✔	✔	✔	✔	✔	✔	✔	✔	✔		✔	✔	✔	✔	
Benzene				✔	✔	✔			✔			✔		✔	✔	
Benzidine				✔	✔	✔			✔							
Benzo(a)pyrene				✔	✔	✔			✔			✔				
Benzo(b)fluoranthene				✔	✔	✔			✔			✔				
Benzo[a]anthracene				✔	✔	✔			✔			✔				
Benzyl alcohol				✔	✔	✔										
Benzyl chloride					✔											
Beryllium				✔	✔	✔		✔	✔					✔		
beta-Hexachlorocyclohexane [beta-BHC]				✔	✔	✔			✔							
Bis(2-chloroethyl) ether [sym-Dichloroethyl ether]				✔	✔	✔			✔							
Bis(2-chloroisopropyl) ether [2,2'-Dichloroisopropyl ether]				✔	✔	✔			✔							
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]		✔	✔	✔	✔	✔	✔		✔							
Bis(chloromethyl) ether [sym-Dichloromethyl ether]				✔	✔											
Bromodichloromethane [Dichlorobromomethane]				✔	✔	✔	✔		✔							

(continued)

Table B-26. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Bromoform [Tribromomethane]				✔	✔	✔	✔		✔							
Bromomethane [Methyl bromide]				✔	✔	✔			✔							
1,3-Butadiene																
n-Butyl alcohol [n-Butanol]					✔											
Butyl benzyl phthalate				✔	✔	✔			✔							
Cadmium		✔		✔	✔	✔	✔	✔	✔	✔		✔		✔		
Carbon disulfide				✔	✔	✔			✔							
Carbon tetrachloride				✔	✔	✔			✔							
Chloral [Trichloroacetaldehyde]																
Chloral hydrate [Trichloroacetaldehyde hydrate]																
Chlordane, alpha & gamma isomers		✔		✔	✔	✔			✔							
4-Chloroaniline [p-aminochlorobenzene]					✔	✔										
Chlorobenzene				✔	✔	✔			✔							
Chlorobenzilate					✔											
Chlorodibromomethane [Dibromochloromethane]				✔	✔	✔	✔		✔							
Chloroethane [Ethyl chloride]				✔	✔	✔			✔							
Chloroform [Trichloromethane]				✔	✔	✔	✔		✔							
Chloromethane [Methyl chloride]				✔	✔	✔			✔							
Chloromethyl methyl ether																
2-Chloronaphthalene [beta-Chloronaphthalene]				✔	✔	✔			✔							
2-Chlorophenol [o-Chlorophenol]				✔	✔	✔			✔							
Chloroprene [2-Chloro-1,3-butadiene]					✔											
Chromium		✔		✔	✔	✔		✔	✔	✔		✔	✔	✔	✔	
Chromium VI [Hexavalent Chromium]					✔	✔			✔	✔		✔				
Chrysene				✔	✔	✔			✔			✔				
Cobalt				✔	✔	✔						✔				
Copper		✔		✔	✔	✔	✔		✔	✔		✔	✔	✔	✔	
m-Cresol [3-Methyl phenol]		✔				✔										
o-Cresol [2-Methyl phenol]		✔			✔	✔										
p-Cresol [4-Methyl phenol]		✔			✔	✔										
Cresols				✔		✔										
Cumene [Isopropyl benzene]				✔	✔	✔										
Cyanide		✔		✔	✔	✔			✔				✔	✔		
Cyanide, amenable					✔	✔			✔							
Cyanogen bromide [Bromine cyanide]																

(continued)

Table B-26. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Cyanogen chloride [Chlorine cyanide]																
Cyclohexanol					✔											
Cyclohexanone				✔	✔											
2,4-D [2,4-Dichlorophenoxyacetic acid]		✔		✔	✔											
p,p'-DDD				✔	✔	✔			✔							
p,p'-DDE				✔	✔	✔			✔							
p,p'-DDT				✔	✔	✔			✔							
Di-n-butyl phthalate				✔	✔	✔	✔		✔							
Diallate					✔											
Dibenz[a,h]anthracene				✔	✔	✔			✔			✔				
1,2-Dibromo-3-chloropropane				✔	✔											
1,2-Dichlorobenzene [o-Dichlorobenzene]				✔	✔	✔			✔							
1,4-Dichlorobenzene [p-Dichlorobenzene]		✔		✔	✔	✔			✔							
3,3'-Dichlorobenzidine				✔	✔	✔			✔							
Dichlorodifluoromethane [CFC-12]				✔	✔											
1,2-Dichloroethane [Ethylene dichloride]				✔	✔	✔			✔							
1,1-Dichloroethylene [Vinylidene chloride]				✔	✔	✔			✔							
cis-1,2-Dichloroethylene				✔	✔	✔										
trans-1,2-Dichloroethylene				✔	✔	✔			✔							
2,4-Dichlorophenol				✔	✔	✔			✔							
1,2-Dichloropropane [Propylene dichloride]				✔	✔	✔			✔							
cis-1,3-Dichloropropylene				✔	✔	✔			✔							
trans-1,3-Dichloropropylene				✔	✔	✔			✔							
Dieldrin				✔	✔	✔			✔							
Diethyl phthalate [DEP]				✔	✔	✔			✔							
Diethylstilbestrol [DES]																
Dimethoate				✔	✔											
3,3'-Dimethoxybenzidine					✔											
N,N-Dimethyl formamide [DMF]					✔	✔										
Dimethyl phthalate [DMP]				✔	✔	✔			✔							
7,12-Dimethylbenz[a]anthracene						✔										
3,3'-Dimethylbenzidine																
2,4-Dimethylphenol				✔	✔	✔			✔							
3,4-Dimethylphenol																
1,3-Dinitrobenzene [m-Dinitrobenzene]					✔											

(continued)

Table B-26. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
2,4-Dinitrophenol				✔	✔	✔			✔							
2,4-Dinitrotoluene		✔		✔	✔	✔			✔							
2,6-Dinitrotoluene				✔	✔	✔			✔							
Dinoseb [2-sec-Butyl-4,6-dinitrophenol]					✔											
n-Dioctyl phthalate				✔	✔	✔	✔		✔							
1,4-Dioxane [1,4-Diethyleneoxide]		✔			✔	✔										
Diphenylamine					✔											
1,2-Diphenylhydrazine				✔	✔	✔			✔							
Direct Black 38																
Direct Blue 6																
Direct Brown 95																
Disulfoton				✔	✔											
Endosulfan				✔	✔	✔			✔							
Endothall																
Endrin		✔		✔	✔	✔			✔							
Epichlorohydrin [1-Chloro-2,3-epoxypropane]		✔			✔											
1,2-Epoxybutane [1,2-Butylene oxide]																
2-Ethoxyethanol acetate [2-EEA]																
2-Ethoxyethanol [Ethylene glycol monoethyl ether]																
Ethyl acetate					✔											
Ethyl benzene				✔	✔	✔			✔			✔			✔	
Ethyl ether [Diethyl ether]					✔											
Ethyl methacrylate					✔											
Ethyl methanesulfonate																
Ethylene dibromide [1,2-Dibromoethane]					✔	✔										
Ethylene glycol		✔		✔	✔	✔								✔		
Ethylene oxide					✔											
Ethylene thiourea							✔									
Ethylidene dichloride [1,1-Dichloroethane]				✔	✔	✔			✔							
Fluoranthene				✔	✔	✔			✔			✔				
Fluorene				✔	✔	✔			✔			✔				
Fluoride				✔	✔	✔			✔			✔		✔	✔	
Formaldehyde		✔		✔	✔	✔						✔				
Formic Acid				✔	✔											
Furan					✔											

(continued)

Table B-26. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Furfural				✔	✔											
Glycidylaldehyde																
Heptachlor		✔		✔	✔	✔			✔							
Heptachlor epoxide, alpha, beta, and gamma isomers		✔		✔	✔				✔							
Hexachloro-1,3-butadiene [Hexachlorobutadiene]				✔	✔	✔			✔							
Hexachlorobenzene				✔	✔	✔			✔							
alpha-Hexachlorocyclohexane [alpha-BHC]				✔	✔	✔			✔							
Hexachlorocyclopentadiene				✔	✔	✔			✔							
Hexachlorodibenzo-p-dioxins [HxCDDs]				✔												
Hexachlorodibenzofurans [HxCDFs]				✔	✔											
Hexachloroethane				✔	✔	✔			✔							
Hexachlorophene					✔											
n-Hexane				✔	✔											
Hydrazine					✔											
Indeno(1,2,3-cd) pyrene				✔	✔	✔			✔			✔				
Isobutyl alcohol [Isobutanol]																
Isophorone				✔	✔	✔			✔							
Kepone					✔											
Lead		✔		✔	✔	✔	✔	✔	✔	✔		✔	✔	✔	✔	
Lindane [gamma-Hexachlorocyclohexane] [gamma-BHC]		✔		✔	✔	✔			✔							
Maleic anhydride																
Maleic hydrazide																
Manganese	✔			✔	✔	✔			✔	✔		✔	✔	✔		
Mercury		✔		✔	✔	✔		✔	✔	✔				✔		
Methacrylonitrile					✔											
Methanol [methyl alcohol]		✔		✔	✔	✔										
Methomyl																
Methoxychlor		✔		✔	✔	✔			✔							
2-Methoxyethanol acetate [2-MEA] [methyl cellosolve acetate]																
2-Methoxyethanol [methyl cellosolve]																
Methyl ethyl ketone [2-Butanone][MEK]				✔	✔	✔			✔							
Methyl isobutyl ketone [Hexone] [4-Methyl-2-pentanone] [MIBK]				✔	✔	✔										
Methyl methacrylate					✔											
Methyl parathion				✔	✔											

(continued)

Table B-26. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Methyl tert-butyl ether [MTBE]				✔	✔	✔									✔	
3-Methylcholanthrene					✔											
4,4'-Methylene bis(2-chloroaniline)					✔											
Methylene bromide [Dibromomethane]				✔	✔											
Methylene chloride [Dichloromethane]				✔	✔	✔			✔							
Molybdenum		✔		✔	✔	✔	✔		✔			✔		✔		
Naphthalene				✔	✔	✔			✔			✔			✔	
Nickel		✔	✔	✔	✔	✔	✔	✔	✔	✔		✔	✔	✔	✔	
Nickel Subsulfide																
Nitrobenzene				✔	✔	✔			✔							
2-Nitropropane																
N-Nitroso-N-methylethylamine					✔											
N-Nitrosodi-n-butylamine					✔											
N-Nitrosodi-n-propylamine [Di-n-propylnitrosamine]				✔	✔	✔			✔							
N-Nitrosodiethylamine					✔											
N-Nitrosodimethylamine				✔	✔	✔			✔							
N-Nitrosodiphenylamine [Diphenylnitrosamine]				✔	✔	✔			✔							
N-Nitrosopiperidine					✔											
N-Nitrosopyrrolidine					✔	✔										
Octamethylpyrophosphoramide																
Parathion				✔	✔											
Pentachlorobenzene					✔											
Pentachlorodibenzo-p-dioxins [PeCDDs]																
Pentachlorodibenzofurans [PeCDFs]				✔												
Pentachloronitrobenzene [PCNB] [Quintobenzene] [Quintozene]					✔											
Pentachlorophenol [PCP]				✔	✔	✔			✔							
Perchlorate																
Phenol				✔	✔	✔			✔			✔		✔		
1,3-Phenylenediamine [m-Phenylenediamine]					✔											
Phorate				✔	✔											
Phthalic anhydride																
Polychlorinated biphenyls [Aroclors]				✔	✔	✔			✔							
Pronamide																
Propylene oxide [1,2-Epoxypropane]					✔											
Pyrene				✔	✔	✔			✔			✔				

(continued)

Table B-26. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Pyridine				✔	✔	✔										
Safrole					✔											
Selenium		✔		✔	✔	✔		✔	✔	✔			✔	✔		
Silver		✔		✔	✔	✔		✔	✔	✔				✔		
Silvex [2,4,5-Trichlorophenoxypropionic acid]		✔		✔	✔											
Strychnine																
Styrene				✔	✔	✔										
Styrene oxide																
Sulfide	✔	✔		✔	✔	✔			✔			✔				
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]				✔		✔										
1,2,4,5-Tetrachlorobenzene					✔											
Tetrachlorodibenzo-p-dioxins [TCDDs]				✔												
Tetrachlorodibenzofurans [TCDFs]				✔												
1,1,1,2-Tetrachloroethane				✔	✔											
1,1,2,2-Tetrachloroethane				✔	✔	✔			✔							
Tetrachloroethylene [Perchloroethylene]				✔	✔	✔			✔					✔		
2,3,4,6-Tetrachlorophenol				✔	✔	✔										
Tetraethyldithiopyrophosphate [Sulfotepp]				✔												
Thallium				✔	✔	✔		✔								
Thiram [Thiuram]							✔									
Toluene				✔	✔	✔			✔			✔			✔	
2,4-Toluenediamine [2,4-Diaminotoluene]																
o-Toluidine																
p-Toluidine																
Toxaphene [Chlorinated camphene]		✔		✔	✔	✔			✔							
1,1,2-Trichloro-1,2,2-trifluoroethane [Freon 113]					✔	✔										
1,2,4-Trichlorobenzene				✔	✔	✔			✔							
1,1,1-Trichloroethane [Methyl chloroform]				✔	✔	✔			✔					✔		
1,1,2-Trichloroethane [Vinyl trichloride]				✔	✔	✔			✔							
Trichloroethylene [TCE]				✔	✔	✔			✔					✔		
Trichlorofluoromethane [Trichloromonofluoromethane] [CFC-11]				✔	✔	✔			✔							
2,4,5-Trichlorophenol		✔		✔	✔	✔										
2,4,6-Trichlorophenol		✔		✔	✔	✔			✔							

(continued)

Table B-26. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
2,4,5-Trichlorophenoxyacetic acid [2,4,5,-T]				✔												
1,2,3-Trichloropropane				✔	✔											
Triethylamine					✔											
1,3,5-Trinitrobenzene [sym-Trinitrobenzene]					✔											
Tris(2,3-dibromopropyl) phosphate																
Vanadium				✔	✔	✔		✔						✔		
Vinyl acetate		✔			✔											
Vinyl chloride [chloroethylene]				✔	✔	✔			✔							
Warfarin																
m-Xylene				✔	✔				✔							
o-Xylene				✔	✔	✔			✔							
p-Xylene				✔	✔				✔							
Xylenes, mixed isomers [Xylenes]				✔	✔	✔									✔	
Zinc	✔	✔		✔	✔	✔	✔	✔	✔	✔		✔	✔	✔	✔	

Table B-27. Chemical Presence in Wastewater in Impoundment by SIC Code (Risk Input Database)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Acenaphthene				✔	✔	✔			✔			✔				
Acetaldehyde [Ethanal]				✔	✔											
Acetone [2-Propanone]				✔	✔	✔			✔							
Acetonitrile [Methyl cyanide]					✔											
Acetophenone					✔											
Acrolein [2-propenal]				✔	✔	✔			✔							
Acrylamide																
Acrylic acid [propenoic acid]					✔											
Acrylonitrile				✔	✔	✔			✔							
Aldicarb																
Aldrin				✔	✔	✔			✔							
Allyl alcohol					✔											
Allyl chloride					✔											
Ammonium vanadate																
Ammonium perchlorate																
Aniline				✔	✔	✔										
Anthracene				✔	✔	✔			✔			✔				
Antimony				✔	✔	✔		✔	✔	✔			✔	✔		
Aramite																
Arsenic		✔		✔	✔	✔		✔	✔	✔		✔		✔		
Barium		✔	✔	✔	✔	✔	✔	✔	✔	✔		✔	✔	✔	✔	
Benzene				✔	✔	✔			✔			✔		✔	✔	
Benzidine				✔	✔	✔			✔							
Benzo(a)pyrene				✔	✔	✔			✔			✔				
Benzo(b)fluoranthene				✔	✔	✔			✔			✔				
Benzo[a]anthracene				✔	✔	✔			✔			✔				
Benzyl alcohol				✔	✔	✔										
Benzyl chloride					✔											
Beryllium				✔	✔	✔		✔	✔					✔		
beta-Hexachlorocyclohexane [beta-BHC]				✔	✔	✔			✔							
Bis(2-chloroethyl) ether [sym-Dichloroethyl ether]				✔	✔	✔			✔							
Bis(2-chloroisopropyl) ether [2,2'-Dichloroisopropyl ether]				✔	✔	✔			✔							
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]		✔	✔	✔	✔	✔	✔		✔							
Bis(chloromethyl) ether [sym-Dichloromethyl ether]				✔	✔											

(continued)

Table B-27. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Bromodichloromethane [Dichlorobromomethane]				✔	✔	✔	✔		✔							
Bromoform [Tribromomethane]				✔	✔	✔	✔		✔							
Bromomethane [Methyl bromide]				✔	✔	✔			✔							
1,3-Butadiene																
n-Butyl alcohol [n-Butanol]					✔											
Butyl benzyl phthalate				✔	✔	✔			✔							
Cadmium		✔		✔	✔	✔	✔	✔	✔	✔		✔		✔		
Carbon disulfide				✔	✔	✔			✔							
Carbon tetrachloride				✔	✔	✔			✔							
Chloral [Trichloroacetaldehyde]																
Chloral hydrate [Trichloroacetaldehyde hydrate]																
Chlordane, alpha & gamma isomers		✔		✔	✔	✔			✔							
4-Chloroaniline [p-aminochlorobenzene]					✔	✔										
Chlorobenzene				✔	✔	✔			✔							
Chlorobenzilate					✔											
Chlorodibromomethane [Dibromochloromethane]				✔	✔	✔	✔		✔							
Chloroethane [Ethyl chloride]				✔	✔	✔			✔							
Chloroform [Trichloromethane]				✔	✔	✔	✔		✔							
Chloromethane [Methyl chloride]				✔	✔	✔			✔							
Chloromethyl methyl ether																
2-Chloronaphthalene [beta-Chloronaphthalene]				✔	✔	✔			✔							
2-Chlorophenol [o-Chlorophenol]				✔	✔	✔			✔							
Chloroprene [2-Chloro-1,3-butadiene]					✔											
Chromium		✔		✔	✔	✔		✔	✔	✔		✔	✔	✔	✔	
Chromium VI [Hexavalent Chromium]					✔	✔			✔	✔		✔				
Chrysene				✔	✔	✔			✔			✔				
Cobalt				✔	✔	✔						✔				
Copper		✔		✔	✔	✔	✔		✔	✔		✔	✔	✔	✔	
m-Cresol [3-Methyl phenol]		✔				✔										
o-Cresol [2-Methyl phenol]		✔			✔	✔										
p-Cresol [4-Methyl phenol]		✔			✔	✔										
Cresols				✔		✔										
Cumene [Isopropyl benzene]				✔	✔	✔										
Cyanide		✔		✔	✔	✔			✔				✔	✔		
Cyanide, amenable					✔	✔			✔							

(continued)

Table B-27. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Cyanogen bromide [Bromine cyanide]																
Cyanogen chloride [Chlorine cyanide]																
Cyclohexanol					✔											
Cyclohexanone				✔	✔											
2,4-D [2,4-Dichlorophenoxyacetic acid]		✔		✔	✔											
p,p'-DDD				✔	✔	✔			✔							
p,p'-DDE				✔	✔	✔			✔							
p,p'-DDT				✔	✔	✔			✔							
Di-n-butyl phthalate				✔	✔	✔	✔		✔							
Diallate					✔											
Dibenz[a,h]anthracene				✔	✔	✔			✔			✔				
1,2-Dibromo-3-chloropropane				✔	✔											
1,2-Dichlorobenzene [o-Dichlorobenzene]				✔	✔	✔			✔							
1,4-Dichlorobenzene [p-Dichlorobenzene]		✔		✔	✔	✔			✔							
3,3'-Dichlorobenzidine				✔	✔	✔			✔							
Dichlorodifluoromethane [CFC-12]				✔	✔											
1,2-Dichloroethane [Ethylene dichloride]				✔	✔	✔			✔							
1,1-Dichloroethylene [Vinylidene chloride]				✔	✔	✔			✔							
cis-1,2-Dichloroethylene				✔	✔	✔										
trans-1,2-Dichloroethylene				✔	✔	✔			✔							
2,4-Dichlorophenol				✔	✔	✔			✔							
1,2-Dichloropropane [Propylene dichloride]				✔	✔	✔			✔							
cis-1,3-Dichloropropylene				✔	✔	✔			✔							
trans-1,3-Dichloropropylene				✔	✔	✔			✔							
Dieldrin				✔	✔	✔			✔							
Diethyl phthalate [DEP]				✔	✔	✔			✔							
Diethylstilbestrol [DES]																
Dimethoate				✔	✔											
3,3'-Dimethoxybenzidine					✔											
N,N-Dimethyl formamide [DMF]					✔	✔										
Dimethyl phthalate [DMP]				✔	✔	✔			✔							
7,12-Dimethylbenz[a]anthracene						✔										
3,3'-Dimethylbenzidine																
2,4-Dimethylphenol				✔	✔	✔			✔							
3,4-Dimethylphenol																

(continued)

Table B-27. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
1,3-Dinitrobenzene [m-Dinitrobenzene]					✔											
2,4-Dinitrophenol				✔	✔	✔			✔							
2,4-Dinitrotoluene		✔		✔	✔	✔			✔							
2,6-Dinitrotoluene				✔	✔	✔			✔							
Dinoseb [2-sec-Butyl-4,6-dinitrophenol]					✔											
n-Dioctyl phthalate				✔	✔	✔	✔		✔							
1,4-Dioxane [1,4-Diethyleneoxide]		✔			✔	✔										
Diphenylamine					✔											
1,2-Diphenylhydrazine				✔	✔	✔			✔							
Direct Black 38																
Direct Blue 6																
Direct Brown 95																
Disulfoton				✔	✔											
Endosulfan				✔	✔	✔			✔							
Endothall																
Endrin		✔		✔	✔	✔			✔							
Epichlorohydrin [1-Chloro-2,3-epoxypropane]		✔			✔											
1,2-Epoxybutane [1,2-Butylene oxide]																
2-Ethoxyethanol acetate [2-EEA]																
2-Ethoxyethanol [Ethylene glycol monoethyl ether]																
Ethyl acetate					✔											
Ethyl benzene				✔	✔	✔			✔			✔			✔	
Ethyl ether [Diethyl ether]					✔											
Ethyl methacrylate					✔											
Ethyl methanesulfonate																
Ethylene dibromide [1,2-Dibromoethane]					✔	✔										
Ethylene glycol		✔		✔	✔	✔								✔		
Ethylene oxide					✔											
Ethylene thiourea							✔									
Ethylidene dichloride [1,1-Dichloroethane]				✔	✔	✔			✔							
Fluoranthene				✔	✔	✔			✔			✔				
Fluorene				✔	✔	✔			✔			✔				
Fluoride				✔	✔	✔			✔			✔		✔	✔	
Formaldehyde		✔		✔	✔	✔						✔				
Formic Acid				✔	✔											

(continued)

Table B-27. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Furan					✔											
Furfural				✔	✔											
Glycidylaldehyde																
Heptachlor		✔		✔	✔	✔			✔							
Heptachlor epoxide, alpha, beta, and gamma isomers		✔		✔	✔				✔							
Hexachloro-1,3-butadiene [Hexachlorobutadiene]				✔	✔	✔			✔							
Hexachlorobenzene				✔	✔	✔			✔							
alpha-Hexachlorocyclohexane [alpha-BHC]				✔	✔	✔			✔							
Hexachlorocyclopentadiene				✔	✔	✔			✔							
Hexachlorodibenzo-p-dioxins [HxCDDs]				✔												
Hexachlorodibenzofurans [HxCDFs]				✔	✔											
Hexachloroethane				✔	✔	✔			✔							
Hexachlorophene					✔											
n-Hexane				✔	✔											
Hydrazine					✔											
Indeno(1,2,3-cd) pyrene				✔	✔	✔			✔			✔				
Isobutyl alcohol [Isobutanol]																
Isophorone				✔	✔	✔			✔							
Kepone					✔											
Lead		✔		✔	✔	✔	✔	✔	✔	✔		✔	✔	✔	✔	
Lindane [gamma-Hexachlorocyclohexane] [gamma-BHC]		✔		✔	✔	✔			✔							
Maleic anhydride																
Maleic hydrazide																
Manganese	✔			✔	✔	✔			✔	✔		✔	✔	✔		
Mercury		✔		✔	✔	✔		✔	✔	✔				✔		
Methacrylonitrile					✔											
Methanol [methyl alcohol]		✔		✔	✔	✔										
Methomyl																
Methoxychlor		✔		✔	✔	✔			✔							
2-Methoxyethanol acetate [2-MEA] [methyl cellosolve acetate]																
2-Methoxyethanol [methyl cellosolve]																
Methyl ethyl ketone [2-Butanone][MEK]				✔	✔	✔			✔							
Methyl isobutyl ketone [Hexone] [4-Methyl-2-pentanone] [MIBK]				✔	✔	✔										
Methyl methacrylate					✔											

(continued)

Table B-27. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Methyl parathion				✔	✔											
Methyl tert-butyl ether [MTBE]				✔	✔	✔									✔	
3-Methylcholanthrene					✔											
4,4'-Methylene bis(2-chloroaniline)					✔											
Methylene bromide [Dibromomethane]				✔	✔											
Methylene chloride [Dichloromethane]				✔	✔	✔			✔							
Molybdenum		✔		✔	✔	✔	✔		✔			✔		✔		
Naphthalene				✔	✔	✔			✔			✔			✔	
Nickel		✔	✔	✔	✔	✔	✔	✔	✔	✔		✔	✔	✔	✔	
Nickel Subsulfide																
Nitrobenzene				✔	✔	✔			✔							
2-Nitropropane																
N-Nitroso-N-methylethylamine					✔											
N-Nitrosodi-n-butylamine					✔											
N-Nitrosodi-n-propylamine [Di-n-propylnitrosamine]				✔	✔	✔			✔							
N-Nitrosodiethylamine					✔											
N-Nitrosodimethylamine				✔	✔	✔			✔							
N-Nitrosodiphenylamine [Diphenylnitrosamine]				✔	✔	✔			✔							
N-Nitrosopiperidine					✔											
N-Nitrosopyrrolidine					✔	✔										
Octamethylpyrophosphoramide																
Parathion				✔	✔											
Pentachlorobenzene					✔											
Pentachlorodibenzo-p-dioxins [PeCDDs]																
Pentachlorodibenzofurans [PeCDFs]				✔												
Pentachloronitrobenzene [PCNB] [Quintobenzene] [Quintozene]					✔											
Pentachlorophenol [PCP]				✔	✔	✔			✔							
Perchlorate																
Phenol				✔	✔	✔			✔			✔		✔		
1,3-Phenylenediamine [m-Phenylenediamine]					✔											
Phorate				✔	✔											
Phthalic anhydride																
Polychlorinated biphenyls [Aroclors]				✔	✔	✔			✔							
Pronamide																

(continued)

Table B-27. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Propylene oxide [1,2-Epoxypropane]					✔											
Pyrene				✔	✔	✔			✔			✔				
Pyridine				✔	✔	✔										
Safrole					✔											
Selenium		✔		✔	✔	✔		✔	✔	✔			✔	✔		
Silver		✔		✔	✔	✔		✔	✔	✔				✔		
Silvex [2,4,5-Trichlorophenoxypropionic acid]		✔		✔	✔											
Strychnine																
Styrene				✔	✔	✔										
Styrene oxide																
Sulfide	✔	✔		✔	✔	✔			✔			✔				
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]				✔		✔										
1,2,4,5-Tetrachlorobenzene					✔											
Tetrachlorodibenzo-p-dioxins [TCDDs]				✔												
Tetrachlorodibenzofurans [TCDFs]				✔												
1,1,1,2-Tetrachloroethane				✔	✔											
1,1,2,2-Tetrachloroethane				✔	✔	✔			✔							
Tetrachloroethylene [Perchloroethylene]				✔	✔	✔			✔					✔		
2,3,4,6-Tetrachlorophenol				✔	✔	✔										
Tetraethyldithiopyrophosphate [Sulfotepp]				✔												
Thallium				✔	✔	✔		✔								
Thiram [Thiuram]							✔									
Toluene				✔	✔	✔			✔			✔			✔	
2,4-Toluenediamine [2,4-Diaminotoluene]																
o-Toluidine																
p-Toluidine																
Toxaphene [Chlorinated camphene]		✔		✔	✔	✔			✔							
1,1,2-Trichloro-1,2,2-trifluoroethane [Freon 113]					✔	✔										
1,2,4-Trichlorobenzene				✔	✔	✔			✔							
1,1,1-Trichloroethane [Methyl chloroform]				✔	✔	✔			✔					✔		
1,1,2-Trichloroethane [Vinyl trichloride]				✔	✔	✔			✔							
Trichloroethylene [TCE]				✔	✔	✔			✔					✔		
Trichlorofluoromethane [Trichloromonofluoromethane] [CFC-11]				✔	✔	✔			✔							

(continued)

Table B-27. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
2,4,5-Trichlorophenol		✔		✔	✔	✔										
2,4,6-Trichlorophenol		✔		✔	✔	✔			✔							
2,4,5-Trichlorophenoxyacetic acid [2,4,5,-T]				✔												
1,2,3-Trichloropropane				✔	✔											
Triethylamine					✔											
1,3,5-Trinitrobenzene [sym-Trinitrobenzene]					✔											
Tris(2,3-dibromopropyl) phosphate																
Vanadium				✔	✔	✔		✔						✔		
Vinyl acetate		✔			✔											
Vinyl chloride [chloroethylene]				✔	✔	✔			✔							
Warfarin																
m-Xylene				✔	✔				✔							
o-Xylene				✔	✔	✔			✔							
p-Xylene				✔	✔				✔							
Xylenes, mixed isomers [Xylenes]				✔	✔	✔									✔	
Zinc	✔	✔		✔	✔	✔	✔	✔	✔	✔		✔	✔	✔	✔	

Table B-28. Chemical Presence in Sludge by SIC Code (Risk Input Database)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Acenaphthene				✔	✔	✔			✔			✔				
Acetaldehyde [Ethanal]				✔	✔											
Acetone [2-Propanone]				✔	✔	✔			✔							
Acetonitrile [Methyl cyanide]					✔											
Acetophenone					✔											
Acrolein [2-propenal]				✔	✔	✔			✔							
Acrylamide																
Acrylic acid [propenoic acid]					✔											
Acrylonitrile				✔	✔	✔			✔							
Aldicarb																
Aldrin				✔	✔	✔			✔							
Allyl alcohol					✔											
Allyl chloride					✔											
Ammonium vanadate																
Ammonium perchlorate																
Aniline				✔	✔	✔										
Anthracene				✔	✔	✔			✔			✔				
Antimony				✔	✔	✔		✔	✔	✔				✔		
Aramite																
Arsenic	✔	✔		✔	✔	✔		✔	✔	✔		✔		✔		✔
Barium	✔			✔	✔	✔	✔	✔	✔	✔		✔		✔		✔
Benzene	✔			✔	✔	✔			✔			✔		✔		
Benzidine				✔	✔	✔			✔							
Benzo(a)pyrene				✔	✔	✔			✔			✔				
Benzo(b)fluoranthene				✔	✔	✔			✔			✔				
Benzo[a]anthracene				✔	✔	✔			✔			✔				
Benzyl alcohol				✔	✔	✔										
Benzyl chloride					✔											
Beryllium				✔	✔	✔		✔	✔					✔		
beta-Hexachlorocyclohexane [beta-BHC]				✔	✔	✔			✔							
Bis(2-chloroethyl) ether [sym-Dichloroethyl ether]				✔	✔	✔			✔							
Bis(2-chloroisopropyl) ether [2,2'-Dichloroisopropyl ether]				✔	✔	✔			✔							
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]				✔	✔	✔	✔		✔							
Bis(chloromethyl) ether [sym-Dichloromethyl ether]				✔	✔											

(continued)

Table B-28. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Bromodichloromethane [Dichlorobromomethane]				✔	✔	✔	✔		✔							
Bromoform [Tribromomethane]				✔	✔	✔	✔		✔							
Bromomethane [Methyl bromide]				✔	✔	✔			✔							
1,3-Butadiene																
n-Butyl alcohol [n-Butanol]					✔											
Butyl benzyl phthalate				✔	✔	✔			✔							
Cadmium	✔	✔		✔	✔	✔	✔	✔	✔	✔		✔		✔		✔
Carbon disulfide				✔	✔	✔			✔							
Carbon tetrachloride	✔			✔	✔	✔			✔							
Chloral [Trichloroacetaldehyde]																
Chloral hydrate [Trichloroacetaldehyde hydrate]																
Chlordane, alpha & gamma isomers	✔			✔	✔	✔			✔							
4-Chloroaniline [p-aminochlorobenzene]					✔	✔										
Chlorobenzene	✔			✔	✔	✔			✔							
Chlorobenzilate					✔											
Chlorodibromomethane [Dibromochloromethane]				✔	✔	✔	✔		✔							
Chloroethane [Ethyl chloride]				✔	✔	✔			✔							
Chloroform [Trichloromethane]	✔			✔	✔	✔	✔		✔							
Chloromethane [Methyl chloride]				✔	✔	✔			✔							
Chloromethyl methyl ether																
2-Chloronaphthalene [beta-Chloronaphthalene]				✔	✔	✔			✔							
2-Chlorophenol [o-Chlorophenol]				✔	✔	✔			✔							
Chloroprene [2-Chloro-1,3-butadiene]					✔											
Chromium	✔	✔		✔	✔	✔		✔	✔	✔		✔		✔	✔	✔
Chromium VI [Hexavalent Chromium]					✔	✔			✔			✔				
Chrysene				✔	✔	✔			✔			✔				
Cobalt				✔	✔	✔			✔			✔				✔
Copper	✔	✔		✔	✔	✔	✔		✔	✔		✔	✔	✔		✔
m-Cresol [3-Methyl phenol]	✔			✔	✔	✔										
o-Cresol [2-Methyl phenol]	✔			✔	✔	✔										
p-Cresol [4-Methyl phenol]	✔			✔	✔	✔										
Cresols				✔	✔	✔			✔							
Cumene [Isopropyl benzene]				✔	✔	✔										
Cyanide				✔	✔	✔			✔					✔		
Cyanide, amenable					✔	✔										

(continued)

Table B-28. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Cyanogen bromide [Bromine cyanide]																
Cyanogen chloride [Chlorine cyanide]																
Cyclohexanol					✔											
Cyclohexanone				✔	✔											
2,4-D [2,4-Dichlorophenoxyacetic acid]	✔			✔	✔				✔							
p,p'-DDD				✔	✔	✔			✔							
p,p'-DDE				✔	✔	✔			✔							
p,p'-DDT				✔	✔	✔			✔							
Di-n-butyl phthalate				✔	✔	✔	✔		✔							
Diallate					✔											
Dibenz[a,h]anthracene				✔	✔	✔			✔			✔				
1,2-Dibromo-3-chloropropane					✔											
1,2-Dichlorobenzene [o-Dichlorobenzene]				✔	✔	✔			✔							
1,4-Dichlorobenzene [p-Dichlorobenzene]	✔			✔	✔	✔			✔							
3,3'-Dichlorobenzidine				✔	✔	✔			✔							
Dichlorodifluoromethane [CFC-12]				✔	✔											
1,2-Dichloroethane [Ethylene dichloride]	✔			✔	✔	✔			✔							
1,1-Dichloroethylene [Vinylidene chloride]	✔			✔	✔	✔			✔							
cis-1,2-Dichloroethylene				✔	✔	✔										
trans-1,2-Dichloroethylene				✔	✔	✔			✔							
2,4-Dichlorophenol				✔	✔	✔			✔							
1,2-Dichloropropane [Propylene dichloride]				✔	✔	✔			✔							
cis-1,3-Dichloropropylene				✔	✔	✔			✔							
trans-1,3-Dichloropropylene				✔	✔	✔			✔							
Dieldrin				✔	✔	✔			✔							
Diethyl phthalate [DEP]				✔	✔	✔			✔							
Diethylstilbestrol [DES]																
Dimethoate				✔	✔											
3,3'-Dimethoxybenzidine					✔											
N,N-Dimethyl formamide [DMF]					✔	✔										
Dimethyl phthalate [DMP]				✔	✔	✔			✔							
7,12-Dimethylbenz[a]anthracene						✔										
3,3'-Dimethylbenzidine																
2,4-Dimethylphenol				✔	✔	✔			✔							
3,4-Dimethylphenol																

(continued)

Table B-28. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
1,3-Dinitrobenzene [m-Dinitrobenzene]					✔											
2,4-Dinitrophenol				✔	✔	✔			✔							
2,4-Dinitrotoluene	✔			✔	✔	✔			✔							
2,6-Dinitrotoluene				✔	✔	✔			✔							
Dinoseb [2-sec-Butyl-4,6-dinitrophenol]					✔				✔							
n-Dioctyl phthalate				✔	✔	✔	✔		✔							
1,4-Dioxane [1,4-Diethyleneoxide]		✔			✔	✔										
Diphenylamine					✔											
1,2-Diphenylhydrazine				✔	✔	✔			✔							
Direct Black 38																
Direct Blue 6																
Direct Brown 95																
Disulfoton				✔	✔											
Endosulfan				✔	✔	✔			✔							
Endothall																
Endrin	✔			✔	✔	✔			✔							
Epichlorohydrin [1-Chloro-2,3-epoxypropane]					✔											
1,2-Epoxybutane [1,2-Butylene oxide]																
2-Ethoxyethanol acetate [2-EEA]																
2-Ethoxyethanol [Ethylene glycol monoethyl ether]																
Ethyl acetate					✔											
Ethyl benzene				✔	✔	✔			✔			✔				
Ethyl ether [Diethyl ether]					✔											
Ethyl methacrylate					✔											
Ethyl methanesulfonate																
Ethylene dibromide [1,2-Dibromoethane]					✔	✔										
Ethylene glycol		✔		✔	✔	✔								✔		
Ethylene oxide					✔											
Ethylene thiourea							✔									
Ethylidene dichloride [1,1-Dichloroethane]				✔	✔	✔			✔							
Fluoranthene				✔	✔	✔			✔			✔				
Fluorene				✔	✔	✔			✔			✔				
Fluoride					✔	✔			✔							
Formaldehyde		✔		✔	✔	✔						✔				
Formic Acid				✔	✔											

(continued)

Table B-28. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Furan					✔											
Furfural				✔	✔	✔										
Glycidylaldehyde																
Heptachlor	✔			✔	✔	✔			✔							
Heptachlor epoxide, alpha, beta, and gamma isomers	✔			✔	✔				✔							
Hexachloro-1,3-butadiene [Hexachlorobutadiene]	✔			✔	✔	✔			✔							
Hexachlorobenzene	✔			✔	✔	✔			✔							
alpha-Hexachlorocyclohexane [alpha-BHC]				✔	✔	✔			✔							
Hexachlorocyclopentadiene				✔	✔	✔			✔							
Hexachlorodibenzo-p-dioxins [HxCDDs]				✔												
Hexachlorodibenzofurans [HxCDFs]				✔	✔											
Hexachloroethane	✔			✔	✔	✔			✔							
Hexachlorophene					✔											
n-Hexane				✔	✔											
Hydrazine					✔											
Indeno(1,2,3-cd) pyrene				✔	✔	✔			✔			✔				
Isobutyl alcohol [Isobutanol]																
Isophorone				✔	✔	✔			✔							
Kepone					✔											
Lead	✔	✔		✔	✔	✔	✔	✔	✔	✔		✔		✔	✔	
Lindane [gamma-Hexachlorocyclohexane] [gamma-BHC]	✔			✔	✔	✔			✔							
Maleic anhydride																
Maleic hydrazide																
Manganese	✔			✔	✔	✔			✔	✔				✔		✔
Mercury	✔	✔		✔	✔	✔		✔	✔	✔				✔		
Methacrylonitrile					✔											
Methanol [methyl alcohol]		✔		✔	✔	✔										
Methomyl																
Methoxychlor	✔			✔	✔	✔			✔							
2-Methoxyethanol acetate [2-MEA] [methyl cellosolve acetate]																
2-Methoxyethanol [methyl cellosolve]																
Methyl ethyl ketone [2-Butanone][MEK]	✔			✔	✔	✔			✔							
Methyl isobutyl ketone [Hexone] [4-Methyl-2-pentanone] [MIBK]				✔	✔	✔										
Methyl methacrylate					✔											

(continued)

Table B-28. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Methyl parathion				✔	✔											
Methyl tert-butyl ether [MTBE]				✔	✔	✔									✔	
3-Methylcholanthrene					✔											
4,4'-Methylene bis(2-chloroaniline)					✔											
Methylene bromide [Dibromomethane]					✔											
Methylene chloride [Dichloromethane]				✔	✔	✔			✔							
Molybdenum	✔	✔		✔	✔	✔	✔		✔					✔		✔
Naphthalene				✔	✔	✔			✔			✔				
Nickel	✔	✔		✔	✔	✔	✔	✔	✔			✔		✔		✔
Nickel Subsulfide																
Nitrobenzene	✔			✔	✔	✔			✔							
2-Nitropropane																
N-Nitroso-N-methylethylamine					✔											
N-Nitrosodi-n-butylamine					✔											
N-Nitrosodi-n-propylamine [Di-n-propylnitrosamine]				✔	✔	✔			✔							
N-Nitrosodiethylamine					✔											
N-Nitrosodimethylamine				✔	✔	✔			✔							
N-Nitrosodiphenylamine [Diphenylnitrosamine]				✔	✔	✔			✔							
N-Nitrosopiperidine					✔											
N-Nitrosopyrrolidine					✔	✔										
Octamethylpyrophosphoramide																
Parathion				✔	✔											
Pentachlorobenzene					✔											
Pentachlorodibenzo-p-dioxins [PeCDDs]				✔												
Pentachlorodibenzofurans [PeCDFs]				✔												
Pentachloronitrobenzene [PCNB] [Quintobenzene] [Quintozene]					✔											
Pentachlorophenol [PCP]	✔			✔	✔	✔			✔							
Perchlorate																
Phenol				✔	✔	✔			✔			✔		✔		
1,3-Phenylenediamine [m-Phenylenediamine]					✔											
Phorate				✔	✔											
Phthalic anhydride																
Polychlorinated biphenyls [Aroclors]	✔			✔	✔	✔			✔							✔
Pronamide																
Propylene oxide [1,2-Epoxypropane]																

(continued)

Table B-28. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
Pyrene				✔	✔	✔			✔			✔				
Pyridine	✔			✔	✔	✔			✔							
Safrole					✔											
Selenium	✔	✔		✔	✔	✔		✔	✔	✔				✔		✔
Silver	✔	✔		✔	✔	✔		✔	✔	✔				✔		
Silvex [2,4,5-Trichlorophenoxypropionic acid]	✔			✔	✔				✔							
Strychnine																
Styrene				✔	✔	✔										
Styrene oxide																
Sulfide				✔	✔	✔			✔			✔				
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]				✔		✔										
1,2,4,5-Tetrachlorobenzene					✔											
Tetrachlorodibenzo-p-dioxins [TCDDs]				✔												
Tetrachlorodibenzofurans [TCDFs]				✔												
1,1,1,2-Tetrachloroethane					✔											
1,1,2,2-Tetrachloroethane				✔	✔	✔			✔							
Tetrachloroethylene [Perchloroethylene]	✔			✔	✔	✔			✔					✔		
2,3,4,6-Tetrachlorophenol				✔	✔	✔										
Tetraethyldithiopyrophosphate [Sulfotepp]				✔												
Thallium				✔	✔	✔		✔	✔					✔		
Thiram [Thiuram]							✔									
Toluene				✔	✔	✔			✔			✔			✔	
2,4-Toluenediamine [2,4-Diaminotoluene]																
o-Toluidine																
p-Toluidine																
Toxaphene [Chlorinated camphene]	✔			✔	✔	✔			✔							
1,1,2-Trichloro-1,2,2-trifluoroethane [Freon 113]					✔	✔										
1,2,4-Trichlorobenzene				✔	✔	✔			✔							
1,1,1-Trichloroethane [Methyl chloroform]				✔	✔	✔			✔					✔		
1,1,2-Trichloroethane [Vinyl trichloride]				✔	✔	✔			✔							
Trichloroethylene [TCE]	✔			✔	✔	✔			✔					✔		
Trichlorofluoromethane [Trichloromonofluoromethane] [CFC-11]				✔	✔	✔			✔							
2,4,5-Trichlorophenol	✔			✔	✔	✔			✔							

(continued)

Table B-28. (continued)

Chemical / Industry Group	Food and kindred products	Textile mill products	Lumber and wood products	Paper and allied products	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastic products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Electric, gas, and sanitary services	Wholesale trade, nondurable goods	National security and international affairs
2,4,6-Trichlorophenol	✔			✔	✔	✔			✔							
2,4,5-Trichlorophenoxyacetic acid [2,4,5,-T]				✔					✔							
1,2,3-Trichloropropane					✔											
Triethylamine					✔											
1,3,5-Trinitrobenzene [sym-Trinitrobenzene]					✔											
Tris(2,3-dibromopropyl) phosphate																
Vanadium				✔	✔	✔		✔	✔					✔		✔
Vinyl acetate					✔											
Vinyl chloride [chloroethylene]	✔			✔	✔	✔			✔							
Warfarin																
m-Xylene				✔	✔				✔							
o-Xylene				✔	✔	✔			✔							
p-Xylene				✔	✔				✔							
Xylenes, mixed isomers [Xylenes]				✔	✔	✔										
Zinc	✔	✔		✔	✔	✔	✔	✔	✔	✔		✔	✔	✔		✔

Table B-29. Chemicals Co-occurring in Wastewater by Human Health Effect, Number of Co-occurring Chemicals, and Facility at which they Co-occur.

Cancer

Facilities having 16 chemicals with cancer effects

Facility 068
Arsenic
Benzene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo[a]anthracene
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]
Chloroform [Trichloromethane]
Chrysene
Dibenz[a,h]anthracene
1,4-Dichlorobenzene [p-Dichlorobenzene]
1,2-Dichloroethane [Ethylene dichloride]
1,4-Dioxane [1,4-Diethyleneoxide]
Ethylene dibromide [1,2-Dibromoethane]
Indeno(1,2,3-cd) pyrene
Tetrachloroethylene [Perchloroethylene]
Trichloroethylene [TCE]

Facilities having 12 chemicals with cancer effects

Facility 103
Acetaldehyde [Ethanal]
Arsenic
Chloroform [Trichloromethane]
Chloromethane [Methyl chloride]
Formaldehyde
Methylene chloride [Dichloromethane]
Pentachlorophenol [PCP]
Polychlorinated biphenyls [Aroclors]
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]
Tetrachlorodibenzo-p-dioxins [TCDDs]
Tetrachlorodibenzofurans [TCDFs]
2,4,6-Trichlorophenol

Facility 126
Arsenic
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo[a]anthracene
Bromodichloromethane [Dichlorobromomethane]
Chloroform [Trichloromethane]
Chrysene
Dibenz[a,h]anthracene
Indeno(1,2,3-cd) pyrene
Methylene chloride [Dichloromethane]
Polychlorinated biphenyls [Aroclors]
Trichloroethylene [TCE]

Facilities having 9 chemicals with cancer effects

Facility 085
Arsenic
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]
Bromodichloromethane [Dichlorobromomethane]

(continued)

Table B-29. (continued)

Bromoform [Tribromomethane]
Carbon tetrachloride
Chlorodibromomethane [Dibromochloromethane]
Chloroform [Trichloromethane]
Chloromethane [Methyl chloride]
Methylene chloride [Dichloromethane]

Facilities having 8 chemicals with cancer effects

Facility 148
Chlordane, alpha & gamma isomers
1,4-Dichlorobenzene [p-Dichlorobenzene]
2,4-Dinitrotoluene
Heptachlor
Heptachlor epoxide, alpha, beta, and gamma isomers
Lindane [gamma-Hexachlorocyclohexane] [gamma-BHC]
Toxaphene [Chlorinated camphene]
2,4,6-Trichlorophenol

Facilities having 7 chemicals with cancer effects

Facility 104
Benzene
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]
Chloroform [Trichloromethane]
1,2-Dichloroethane [Ethylene dichloride]
1,2-Dichloropropane [Propylene dichloride]
1,1,2-Trichloroethane [Vinyl trichloride]
Vinyl chloride [chloroethylene]

Facility 174
Arsenic
Benzene
Benzo[a]anthracene
Chrysene
Dibenz[a,h]anthracene
Indeno(1,2,3-cd) pyrene
Methylene chloride [Dichloromethane]

Facilities having 6 chemicals with cancer effects

Facility 021
Acetaldehyde [Ethanal]
Benzene
1,2-Dichloroethane [Ethylene dichloride]
1,4-Dioxane [1,4-Diethyleneoxide]
Ethylene oxide
Formaldehyde

Facility 046
Acrylonitrile
Benzene
Bis(2-chloroethyl) ether [sym-Dichloroethyl ether]
Bis(2-chloroisopropyl) ether [2,2'-Dichloroisopropyl ether]
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]
1,2-Dichloropropane [Propylene dichloride]

Facility 084
Benzo(a)pyrene
Benzo(b)fluoranthene

(continued)

Table B-29. (continued)

Benzo[a]anthracene
Chrysene
Formaldehyde
Indeno(1,2,3-cd) pyrene

Facility 118
Acetaldehyde [Ethanal]
Arsenic
Chloroform [Trichloromethane]
Formaldehyde
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]
Tetrachlorodibenzofurans [TCDFs]

Facility 134
Chloroform [Trichloromethane]
1,2-Dichloroethane [Ethylene dichloride]
Ethylene oxide
Hexachlorobenzene
Hexachlorodibenzofurans [HxCDFs]
Propylene oxide [1,2-Epoxypropane]

Facility 157
Arsenic
Bromodichloromethane [Dichlorobromomethane]
Chlorodibromomethane [Dibromochloromethane]
Chloroform [Trichloromethane]
Formaldehyde
Methylene chloride [Dichloromethane]

Facilities having 5 chemicals with cancer effects

Facility 002
Benzo(a)pyrene
Bromodichloromethane [Dichlorobromomethane]
Chlorodibromomethane [Dibromochloromethane]
Chloroform [Trichloromethane]
Chrysene

Facility 012
Acrylonitrile
Arsenic
Bromodichloromethane [Dichlorobromomethane]
Bromoform [Tribromomethane]
Chloroform [Trichloromethane]

Facility 038
Acetaldehyde [Ethanal]
Chloroform [Trichloromethane]
Chloromethane [Methyl chloride]
Formaldehyde
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]

Facility 041
Acetaldehyde [Ethanal]
Formaldehyde
Hexachlorodibenzo-p-dioxins [HxCDDs]
Hexachlorodibenzofurans [HxCDFs]
Pentachlorodibenzofurans [PeCDFs]

(continued)

Table B-29. (continued)

Facility 151
Aniline
beta-Hexachlorocyclohexane [beta-BHC]
Chloroform [Trichloromethane]
Heptachlor epoxide, alpha, beta, and gamma isomers
alpha-Hexachlorocyclohexane [alpha-BHC]

Facility 156
Acetaldehyde [Ethanal]
Formaldehyde
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]
Tetrachlorodibenzo-p-dioxins [TCDDs]
Tetrachlorodibenzofurans [TCDFs]

Facility 160
Arsenic
Bromodichloromethane [Dichlorobromomethane]
Chloroform [Trichloromethane]
Methylene chloride [Dichloromethane]
2,4,6-Trichlorophenol

Facilities having 4 chemicals with cancer effects

Facility 035
Benzene
Benzo(a)pyrene
Benzo[a]anthracene
Chrysene

Facility 048
Bromodichloromethane [Dichlorobromomethane]
Bromoform [Tribromomethane]
Chlorodibromomethane [Dibromochloromethane]
Chloroform [Trichloromethane]

Facility 081
Bromoform [Tribromomethane]
Chloroform [Trichloromethane]
1,1-Dichloroethylene [Vinylidene chloride]
Methylene chloride [Dichloromethane]

Facility 115
Benzene
Chloroform [Trichloromethane]
Chloromethane [Methyl chloride]
Methylene chloride [Dichloromethane]

Facility 185
Chloroform [Trichloromethane]
1,2-Dichloroethane [Ethylene dichloride]
Formaldehyde
Methylene chloride [Dichloromethane]

Facilities having 3 chemicals with cancer effects

Facility 022
Acetaldehyde [Ethanal]
Chloroform [Trichloromethane]
Formaldehyde

(continued)

Table B-29. (continued)

Facility 023
Acetaldehyde [Ethanal]
Arsenic
Chloroform [Trichloromethane]

Facility 037
Arsenic
Benzene
Chrysene

Facility 071
Acetaldehyde [Ethanal]
Chloromethane [Methyl chloride]
Tetrachlorodibenzofurans [TCDFs]

Facility 128
Arsenic
Benzene
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]

Facility 159
Arsenic
Benzene
N-Nitrosodiphenylamine [Diphenylnitrosamine]

Facility 173
Acetaldehyde [Ethanal]
Arsenic
Chloroform [Trichloromethane]

Facilities having 2 chemicals with cancer effects

Facility 006
Chloroform [Trichloromethane]
Tetrachlorodibenzo-p-dioxins [TCDDs]

Facility 007
Arsenic
Benzene

Facility 053
Acetaldehyde [Ethanal]
Formaldehyde

Facility 088
Acetaldehyde [Ethanal]
Chloroform [Trichloromethane]

Facility 091
Aniline
Benzene

Facility 098
Acetaldehyde [Ethanal]
Chloroform [Trichloromethane]

Facility 107
Chloroform [Trichloromethane]
Methylene chloride [Dichloromethane]

(continued)

Table B-29. (continued)

Facility 127
Arsenic
Formaldehyde

Facility 180
Arsenic
Chloroform [Trichloromethane]

Facility 183
Aniline
Chloromethane [Methyl chloride]

Facility 187
Arsenic
Bromoform [Tribromomethane]

Facility 191
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]
Formaldehyde

Body weight

Facilities having 8 chemicals with body weight effects

Facility 068
m-Cresol [3-Methyl phenol]
o-Cresol [2-Methyl phenol]
Cyanide
1,2-Dichlorobenzene [o-Dichlorobenzene]
Diethyl phthalate [DEP]
Naphthalene
Nickel
Xylenes, mixed isomers [Xylenes]

Facilities having 7 chemicals with body weight effects

Facility 021
o-Cresol [2-Methyl phenol]
Ethyl acetate
Ethyl ether [Diethyl ether]
Formaldehyde
Formic Acid
Naphthalene
Xylenes, mixed isomers [Xylenes]

Facilities having 6 chemicals with body weight effects

Facility 118
Cresols
Cyanide
Formaldehyde
Formic Acid
Nickel
Xylenes, mixed isomers [Xylenes]

Facility 157
Cyanide

(continued)

Table B-29. (continued)

Formaldehyde
Nickel
m-Xylene
o-Xylene
p-Xylene

Facilities having 4 chemicals with body weight effects

Facility 023
Cyanide
Ethyl acetate
Ethyl ether [Diethyl ether]
Formic Acid

Facility 041
Cresols
Formaldehyde
Nickel
Xylenes, mixed isomers [Xylenes]

Facility 091
o-Cresol [2-Methyl phenol]
Naphthalene
Nickel
Xylenes, mixed isomers [Xylenes]

Facility 103
Cresols
Formaldehyde
Naphthalene
Nickel

Facility 105
Cyclohexanone
Naphthalene
Nickel
Vinyl acetate

Facility 137
Cyanide
Formaldehyde
Formic Acid
Nickel

Facility 158
Diethyl phthalate [DEP]
Ethyl acetate
Ethyl ether [Diethyl ether]
Nickel

Facility 179
Cyanide
m-Xylene
o-Xylene
p-Xylene

Facility 185
Cyanide
Formaldehyde
Formic Acid

(continued)

Table B-29. (continued)

Nickel

Facility 191
Cyanide
Formaldehyde
Nickel
Vinyl acetate

Facilities having 3 chemicals with body weight effects

Facility 018
Nickel
o-Xylene
Xylenes, mixed isomers [Xylenes]

Facility 032
Cyanide
Naphthalene
Nickel

Facility 037
Naphthalene
Nickel
Xylenes, mixed isomers [Xylenes]

Facility 104
Cyanide
Diethyl phthalate [DEP]
Naphthalene

Facility 127
Cresols
Formaldehyde
Nickel

Facility 130
m-Cresol [3-Methyl phenol]
o-Cresol [2-Methyl phenol]
Cresols

Facility 159
Cyanide
Nickel
Xylenes, mixed isomers [Xylenes]

Facility 193
Naphthalene
Nickel
Xylenes, mixed isomers [Xylenes]

Facilities having 2 chemicals with body weight effects

Facility 013
Chloroprene [2-Chloro-1,3-butadiene]
Xylenes, mixed isomers [Xylenes]

Facility 022
Formaldehyde
Nickel

(continued)

Table B-29. (continued)

Facility 029
Cyanide
Nickel

Facility 035
Naphthalene
Xylenes, mixed isomers [Xylenes]

Facility 036
Cyanide
Nickel

Facility 045
Cyclohexanone
Nickel

Facility 046
Naphthalene
Nickel

Facility 053
Formaldehyde
Nickel

Facility 058
Formaldehyde
Nickel

Facility 084
Formaldehyde
Nickel

Facility 088
Formic Acid
Nickel

Facility 114
Cyanide
Nickel

Facility 126
Cyanide
Naphthalene

Facility 135
Cyanide
Nickel

Facility 140
Formaldehyde
Nickel

Facility 148
m-Cresol [3-Methyl phenol]
o-Cresol [2-Methyl phenol]

Facility 156
Cresols
Formaldehyde

(continued)

Table B-29. (continued)

Facility 173
Cresols
Naphthalene

Developmental

Facilities having 4 chemicals with developmental effects

Facility 068
Carbon disulfide
Ethyl benzene
Methyl ethyl ketone [2-Butanone][MEK]
Phenol

Facilities having 3 chemicals with developmental effects

Facility 041
Carbon disulfide
Methyl ethyl ketone [2-Butanone][MEK]
Phenol

Facility 103
Carbon disulfide
Methyl ethyl ketone [2-Butanone][MEK]
Phenol

Facility 105
Ethyl benzene
Methyl ethyl ketone [2-Butanone][MEK]
Phenol

Facility 151
Carbon disulfide
Methyl ethyl ketone [2-Butanone][MEK]
Phenol

Facility 156
Carbon disulfide
Methyl ethyl ketone [2-Butanone][MEK]
Phenol

Facility 160
Ethyl benzene
Methyl ethyl ketone [2-Butanone][MEK]
Phenol

Facilities having 2 chemicals with developmental effects

Facility 018
Ethyl benzene
Phenol

Facility 021
Ethyl benzene
Phenol

(continued)

Table B-29. (continued)

Facility 046
Ethyl benzene
Methyl ethyl ketone [2-Butanone][MEK]

Facility 054
Methyl ethyl ketone [2-Butanone][MEK]
Phenol

Facility 071
Methyl ethyl ketone [2-Butanone][MEK]
Phenol

Facility 085
Chloroethane [Ethyl chloride]
Phenol

Facility 086
Methyl ethyl ketone [2-Butanone][MEK]
Phenol

Facility 091
Ethyl benzene
Phenol

Facility 118
Carbon disulfide
Methyl ethyl ketone [2-Butanone][MEK]

Facility 127
Methyl ethyl ketone [2-Butanone][MEK]
Phenol

Facility 159
Ethyl benzene
Phenol

Facility 173
Methyl ethyl ketone [2-Butanone][MEK]
Phenol

Facility 174
Ethyl benzene
Phenol

(continued)

Table B-29. (continued)

Hematological

Facilities having 7 chemicals with hematological effects

Facility 068
Antimony
2,4-Dimethylphenol
Fluoranthene
Fluorene
Mercury
Styrene
Zinc

Facilities having 5 chemicals with hematological effects

Facility 046
Bis(2-chloroisopropyl) ether [2,2'-Dichloroisopropyl ether]
2,6-Dinitrotoluene
Mercury
Styrene
Zinc

Facility 091
Antimony
2,4-Dimethylphenol
Fluorene
Mercury
Zinc

Facilities having 4 chemicals with hematological effects

Facility 104
Fluoranthene
Fluorene
1,1,2-Trichloroethane [Vinyl trichloride]
Zinc

Facility 126
Fluoranthene
Fluorene
Mercury
Zinc

Facility 159
Antimony
Fluoranthene
Mercury
Zinc

Facilities having 3 chemicals with hematological effects

Facility 037
Antimony
Mercury
Zinc

(continued)

Table B-29. (continued)

Facility 118
Antimony
Mercury
Zinc

Facility 160
Antimony
Mercury
Zinc

Facility 174
Fluoranthene
Mercury
Zinc

Facility 180
Antimony
Mercury
Zinc

Facility 187
Antimony
Mercury
Zinc

Facilities having 2 chemicals with hematological effects

Facility 005
Mercury
Zinc

Facility 006
Mercury
Zinc

Facility 012
Mercury
Zinc

Facility 014
Mercury
Zinc

Facility 019
Antimony
Zinc

Facility 021
Ethylene oxide
Styrene

Facility 022
2,4-Dimethylphenol
Zinc

Facility 028
Mercury
Zinc

(continued)

Table B-29. (continued)

Facility 036
Mercury
Zinc

Facility 041
Styrene
Zinc

Facility 044
Mercury
Zinc

Facility 045
Mercury
Zinc

Facility 050
Antimony
Zinc

Facility 080
Mercury
Zinc

Facility 084
Fluoranthene
Zinc

Facility 085
Mercury
Zinc

Facility 088
Mercury
Zinc

Facility 103
Antimony
Zinc

Facility 105
Styrene
Zinc

Facility 114
Fluorene
Zinc

Facility 123
Mercury
Zinc

Facility 128
Mercury
Zinc

Facility 135
Antimony
Zinc

(continued)

Table B-29. (continued)

Facility 148
2,4-D [2,4-Dichlorophenoxyacetic acid]
2,4-Dinitrotoluene

Facility 157
Mercury
Zinc

Facility 164
Mercury
Zinc

Facility 170
Antimony
Zinc

Facility 179
Mercury
Zinc

Facility 183
Styrene
Zinc

Kidney

Facilities having 11 chemicals with kidney effects

Facility 068
Barium
Cadmium
Chlorobenzene
Chloroform [Trichloromethane]
Ethyl benzene
Ethylene glycol
Ethylidene dichloride [1,1-Dichloroethane]
Fluoranthene
Methyl tert-butyl ether [MTBE]
Pyrene
Toluene

Facilities having 8 chemicals with kidney effects

Facility 103
Acetone [2-Propanone]
Barium
Cadmium
Chloroform [Trichloromethane]
Chloromethane [Methyl chloride]
Ethylene glycol
Methyl isobutyl ketone [Hexone] [4-Methyl-2-pentanone] [MIBK]
Pentachlorophenol [PCP]

Facilities having 7 chemicals with kidney effects

Facility 002
Acetone [2-Propanone]

(continued)

Table B-29. (continued)

Barium
Bromodichloromethane [Dichlorobromomethane]
Cadmium
Chloroform [Trichloromethane]
Methyl tert-butyl ether [MTBE]
Pyrene

Facility 021
Acetone [2-Propanone]
Allyl alcohol
Barium
n-Dioctyl phthalate
Ethyl benzene
Ethylene glycol
Toluene

Facility 126
Acetone [2-Propanone]
Barium
Bromodichloromethane [Dichlorobromomethane]
Cadmium
Chloroform [Trichloromethane]
Fluoranthene
Pyrene

Facility 160
Acetone [2-Propanone]
Barium
Bromodichloromethane [Dichlorobromomethane]
Cadmium
Chloroform [Trichloromethane]
Ethyl benzene
Toluene

Facilities having 6 chemicals with kidney effects

Facility 104
Chlorobenzene
Chloroform [Trichloromethane]
Ethyl benzene
Fluoranthene
Pyrene
Toluene

Facility 118
Barium
Cadmium
Chloroform [Trichloromethane]
Ethylene glycol
Methyl isobutyl ketone [Hexone] [4-Methyl-2-pentanone] [MIBK]
2,4,5-Trichlorophenol

Facility 157
Barium
Bromodichloromethane [Dichlorobromomethane]
Cadmium
Chloroform [Trichloromethane]
Ethyl benzene
Toluene

(continued)

Table B-29. (continued)

Facility 159
Barium
Cadmium
Ethyl benzene
Fluoranthene
Pyrene
Toluene

Facilities having 5 chemicals with kidney effects

Facility 012
Acetone [2-Propanone]
Barium
Bromodichloromethane [Dichlorobromomethane]
Cadmium
Chloroform [Trichloromethane]

Facility 023
Acetone [2-Propanone]
Allyl alcohol
Chloroform [Trichloromethane]
Ethylene glycol
Methyl tert-butyl ether [MTBE]

Facility 038
Acetone [2-Propanone]
Barium
Chloroform [Trichloromethane]
Chloromethane [Methyl chloride]
Ethylene glycol

Facility 046
Acetone [2-Propanone]
Barium
2,6-Dinitrotoluene
Ethyl benzene
Toluene

Facility 156
Acetone [2-Propanone]
Barium
Cumene [Isopropyl benzene]
Ethylene glycol
Methyl isobutyl ketone [Hexone] [4-Methyl-2-pentanone] [MIBK]

Facility 174
Barium
Ethyl benzene
Fluoranthene
Pyrene
Toluene

Facility 191
Barium
Cadmium
Epichlorohydrin [1-Chloro-2,3-epoxypropane]
Ethylene glycol
Vinyl acetate

(continued)

Table B-29. (continued)

Facilities having 4 chemicals with kidney effects

Facility 018
Barium
Ethyl benzene
Ethylene glycol
Toluene

Facility 022
Barium
Cadmium
Chloroform [Trichloromethane]
Ethylene glycol

Facility 084
Acetone [2-Propanone]
Barium
Fluoranthene
Pyrene

Facility 085
Bromodichloromethane [Dichlorobromomethane]
Chloroform [Trichloromethane]
Chloromethane [Methyl chloride]
n-Dioctyl phthalate

Facility 091
Barium
Ethyl benzene
Methyl tert-butyl ether [MTBE]
Toluene

Facility 105
Acetone [2-Propanone]
Ethyl benzene
Toluene
Vinyl acetate

Facility 115
Barium
Chloroform [Trichloromethane]
Chloromethane [Methyl chloride]
Ethylidene dichloride [1,1-Dichloroethane]

Facility 173
Barium
Chloroform [Trichloromethane]
Ethylene glycol
Toluene

Facility 180
Acetone [2-Propanone]
Barium
Chloroform [Trichloromethane]
Toluene

Facility 183
Chloromethane [Methyl chloride]
Ethyl benzene
Ethylene glycol

(continued)

Table B-29. (continued)

Toluene

Facilities having 3 chemicals with kidney effects

Facility 006
Barium
Chloroform [Trichloromethane]
Ethylene glycol

Facility 032
Barium
Cadmium
Pyrene

Facility 035
Ethyl benzene
Pyrene
Toluene

Facility 037
Cadmium
Pyrene
Toluene

Facility 041
Barium
Cumene [Isopropyl benzene]
Ethylene glycol

Facility 077
Acetone [2-Propanone]
Cadmium
Toluene

Facility 081
Barium
Chloroform [Trichloromethane]
1,1-Dichloroethylene [Vinylidene chloride]

Facility 148
2,4-D [2,4-Dichlorophenoxyacetic acid]
Lindane [gamma-Hexachlorocyclohexane] [gamma-BHC]
2,4,5-Trichlorophenol

Facility 151
Acetone [2-Propanone]
Barium
Chloroform [Trichloromethane]

Facility 172
Barium
Cadmium
n-Dioctyl phthalate

Facility 193
Barium
Ethyl benzene
Toluene

(continued)

Table B-29. (continued)

Facilities having 2 chemicals with kidney effects

Facility 004
Barium
Cadmium

Facility 005
Barium
Cadmium

Facility 013
Ethyl benzene
Toluene

Facility 014
Barium
Cadmium

Facility 036
Barium
Cadmium

Facility 039
Allyl alcohol
Chloromethane [Methyl chloride]

Facility 040
Barium
Cadmium

Facility 043
Barium
Toluene

Facility 048
Bromodichloromethane [Dichlorobromomethane]
Chloroform [Trichloromethane]

Facility 050
Barium
Cadmium

Facility 053
Acetone [2-Propanone]
Cadmium

Facility 080
Barium
Cadmium

Facility 086
Barium
Cadmium

Facility 088
Barium
Chloroform [Trichloromethane]

Facility 090
Barium

(continued)

Table B-29. (continued)

Cadmium

Facility 116
Barium
Pentachlorophenol [PCP]

Facility 123
Barium
Cadmium

Facility 128
Ethyl benzene
Toluene

Facility 134
Chloroform [Trichloromethane]
Ethylene glycol

Facility 135
Barium
Cadmium

Facility 164
Barium
Cadmium

Facility 167
Acetone [2-Propanone]
Toluene

Facility 176
Barium
Cadmium

Facility 185
Chloroform [Trichloromethane]
Epichlorohydrin [1-Chloro-2,3-epoxypropane]

Liver

Facilities having 14 chemicals with liver effects

Facility 068
Acenaphthene
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]
Chlorobenzene
Chloroform [Trichloromethane]
1,4-Dichlorobenzene [p-Dichlorobenzene]
N,N-Dimethyl formamide [DMF]
Ethyl benzene
Fluoranthene
Methanol [methyl alcohol]
Methyl tert-butyl ether [MTBE]
Pyridine
Styrene
Tetrachloroethylene [Perchloroethylene]
Toluene

(continued)

Table B-29. (continued)

Facilities having 11 chemicals with liver effects

Facility 104
Acenaphthene
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]
Chlorobenzene
Chloroform [Trichloromethane]
1,2-Dichloropropane [Propylene dichloride]
Ethyl benzene
Fluoranthene
Toluene
1,2,4-Trichlorobenzene
1,1,2-Trichloroethane [Vinyl trichloride]
Vinyl chloride [chloroethylene]

Facility 148
Chlordane, alpha & gamma isomers
2,4-D [2,4-Dichlorophenoxyacetic acid]
1,4-Dichlorobenzene [p-Dichlorobenzene]
2,4-Dinitrotoluene
Endrin
Heptachlor
Heptachlor epoxide, alpha, beta, and gamma isomers
Lindane [gamma-Hexachlorocyclohexane] [gamma-BHC]
Silvex [2,4,5-Trichlorophenoxypropionic acid]
Toxaphene [Chlorinated camphene]
2,4,5-Trichlorophenol

Facilities having 10 chemicals with liver effects

Facility 046
Acetone [2-Propanone]
Bis(2-chloroethyl) ether [sym-Dichloroethyl ether]
Bis(2-chloroisopropyl) ether [2,2'-Dichloroisopropyl ether]
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]
1,2-Dichloropropane [Propylene dichloride]
2,6-Dinitrotoluene
Ethyl benzene
Methanol [methyl alcohol]
Styrene
Toluene

Facility 103
Acetone [2-Propanone]
Chloroform [Trichloromethane]
Methanol [methyl alcohol]
Methyl isobutyl ketone [Hexone] [4-Methyl-2-pentanone] [MIBK]
Methylene chloride [Dichloromethane]
Pentachlorophenol [PCP]
Polychlorinated biphenyls [Aroclors]
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]
2,3,4,6-Tetrachlorophenol
Thallium

Facilities having 8 chemicals with liver effects

Facility 021
Acetone [2-Propanone]
Allyl alcohol
n-Dioctyl phthalate

(continued)

Table B-29. (continued)

Ethyl benzene
Methanol [methyl alcohol]
Pyridine
Styrene
Toluene

Facility 085
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]
Bromodichloromethane [Dichlorobromomethane]
Bromoform [Tribromomethane]
Carbon tetrachloride
Chlorodibromomethane [Dibromochloromethane]
Chloroform [Trichloromethane]
n-Dioctyl phthalate
Methylene chloride [Dichloromethane]

Facilities having 7 chemicals with liver effects

Facility 023
Acetone [2-Propanone]
Allyl alcohol
Chloroform [Trichloromethane]
N,N-Dimethyl formamide [DMF]
Methanol [methyl alcohol]
Methyl tert-butyl ether [MTBE]
Pyridine

Facility 126
Acenaphthene
Acetone [2-Propanone]
Bromodichloromethane [Dichlorobromomethane]
Chloroform [Trichloromethane]
Fluoranthene
Methylene chloride [Dichloromethane]
Polychlorinated biphenyls [Aroclors]

Facilities having 6 chemicals with liver effects

Facility 105
Acenaphthene
Acetone [2-Propanone]
Ethyl benzene
Methanol [methyl alcohol]
Styrene
Toluene

Facility 118
Chloroform [Trichloromethane]
Methanol [methyl alcohol]
Methyl isobutyl ketone [Hexone] [4-Methyl-2-pentanone] [MIBK]
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]
Thallium
2,4,5-Trichlorophenol

(continued)

Table B-29. (continued)

Facility 157
Bromodichloromethane [Dichlorobromomethane]
Chlorodibromomethane [Dibromochloromethane]
Chloroform [Trichloromethane]
Ethyl benzene
Methylene chloride [Dichloromethane]
Toluene

Facility 160
Acetone [2-Propanone]
Bromodichloromethane [Dichlorobromomethane]
Chloroform [Trichloromethane]
Ethyl benzene
Methylene chloride [Dichloromethane]
Toluene

Facilities having 5 chemicals with liver effects

Facility 002
Acetone [2-Propanone]
Bromodichloromethane [Dichlorobromomethane]
Chlorodibromomethane [Dibromochloromethane]
Chloroform [Trichloromethane]
Methyl tert-butyl ether [MTBE]

Facility 151
Acetone [2-Propanone]
beta-Hexachlorocyclohexane [beta-BHC]
Chloroform [Trichloromethane]
Heptachlor epoxide, alpha, beta, and gamma isomers
alpha-Hexachlorocyclohexane [alpha-BHC]

Facilities having 4 chemicals with liver effects

Facility 012
Acetone [2-Propanone]
Bromodichloromethane [Dichlorobromomethane]
Bromoform [Tribromomethane]
Chloroform [Trichloromethane]

Facility 038
Acetone [2-Propanone]
Chloroform [Trichloromethane]
Methanol [methyl alcohol]
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]

Facility 048
Bromodichloromethane [Dichlorobromomethane]
Bromoform [Tribromomethane]
Chlorodibromomethane [Dibromochloromethane]
Chloroform [Trichloromethane]

Facility 081
Bromoform [Tribromomethane]
Chloroform [Trichloromethane]
1,1-Dichloroethylene [Vinylidene chloride]
Methylene chloride [Dichloromethane]

Facility 091
Acenaphthene

(continued)

Table B-29. (continued)

Ethyl benzene
Methyl tert-butyl ether [MTBE]
Toluene

Facility 156
Acetone [2-Propanone]
Methanol [methyl alcohol]
Methyl isobutyl ketone [Hexone] [4-Methyl-2-pentanone] [MIBK]
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]

Facility 159
Ethyl benzene
Fluoranthene
Thallium
Toluene

Facility 174
Ethyl benzene
Fluoranthene
Methylene chloride [Dichloromethane]
Toluene

Facility 183
Ethyl benzene
Methanol [methyl alcohol]
Styrene
Toluene

Facilities having 3 chemicals with liver effects

Facility 022
Chloroform [Trichloromethane]
Furfural
Methanol [methyl alcohol]

Facility 035
Acenaphthene
Ethyl benzene
Toluene

Facility 077
Acetone [2-Propanone]
Methanol [methyl alcohol]
Toluene

Facility 084
Acetone [2-Propanone]
Fluoranthene
Methanol [methyl alcohol]

Facility 128
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]
Ethyl benzene
Toluene

Facility 167
Acetone [2-Propanone]
Toluene
1,2,4-Trichlorobenzene

(continued)

Table B-29. (continued)

Facility 172
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]
n-Dioctyl phthalate
Ethylene thiourea

Facility 173
Chloroform [Trichloromethane]
Methanol [methyl alcohol]
Toluene

Facility 180
Acetone [2-Propanone]
Chloroform [Trichloromethane]
Toluene

Facility 185
Chloroform [Trichloromethane]
Methanol [methyl alcohol]
Methylene chloride [Dichloromethane]

Facilities having 2 chemicals with liver effects

Facility 006
Chloroform [Trichloromethane]
Methanol [methyl alcohol]

Facility 013
Ethyl benzene
Toluene

Facility 018
Ethyl benzene
Toluene

Facility 039
Allyl alcohol
Methanol [methyl alcohol]

Facility 041
Methanol [methyl alcohol]
Styrene

Facility 053
Acetone [2-Propanone]
Methanol [methyl alcohol]

Facility 088
Chloroform [Trichloromethane]
Methanol [methyl alcohol]

Facility 098
Chloroform [Trichloromethane]
Methanol [methyl alcohol]

Facility 107
Chloroform [Trichloromethane]
Methylene chloride [Dichloromethane]

Facility 115
Chloroform [Trichloromethane]

(continued)

Table B-29. (continued)

Methylene chloride [Dichloromethane]

Facility 134
Chloroform [Trichloromethane]
Hexachlorobenzene

Facility 137
Acetone [2-Propanone]
Methanol [methyl alcohol]

Facility 158
Methanol [methyl alcohol]
Toluene

Facility 191
Bis(2-ethylhexyl) phthalate [Dioctyl phthalate]
Methanol [methyl alcohol]

Facility 193
Ethyl benzene
Toluene

Lung

Facilities having 4 chemicals with lung effects

Facility 080
Arsenic
Beryllium
Cadmium
Chromium VI [Hexavalent Chromium]

Facility 135
Arsenic
Beryllium
Cadmium
Chromium VI [Hexavalent Chromium]

Facilities having 3 chemicals with lung effects

Facility 012
Arsenic
Beryllium
Cadmium

Facility 014
Arsenic
Cadmium
Chromium VI [Hexavalent Chromium]

Facility 029
Beryllium
Cadmium
Chromium VI [Hexavalent Chromium]

Facility 036
Arsenic

(continued)

Table B-29. (continued)

Beryllium
Cadmium

Facility 068
Arsenic
Beryllium
Cadmium

Facility 103
Arsenic
Beryllium
Cadmium

Facility 118
Arsenic
Beryllium
Cadmium

Facility 160
Arsenic
Beryllium
Cadmium

Facilities having 2 chemicals with lung effects

Facility 004
Arsenic
Cadmium

Facility 007
Arsenic
Cadmium

Facility 037
Arsenic
Cadmium

Facility 040
Arsenic
Cadmium

Facility 044
Arsenic
Cadmium

Facility 046
Bis(2-chloroisopropyl) ether [2,2'-Dichloroisopropyl ether]
Chromium VI [Hexavalent Chromium]

Facility 050
Beryllium
Cadmium

Facility 067
Arsenic
Cadmium

Facility 085
Arsenic
Chromium VI [Hexavalent Chromium]

(continued)

Table B-29. (continued)

Facility 086
Cadmium
Chromium VI [Hexavalent Chromium]

Facility 126
Arsenic
Cadmium

Facility 157
Arsenic
Cadmium

Facility 159
Arsenic
Cadmium

Facility 174
Arsenic
Beryllium

Facility 176
Arsenic
Cadmium

Facility 182
Arsenic
Cadmium

Neurological

Facilities having 11 chemicals with neurological effects

Facility 068
Carbon disulfide
m-Cresol [3-Methyl phenol]
o-Cresol [2-Methyl phenol]
p-Cresol [4-Methyl phenol]
Cyanide
2,4-Dimethylphenol
Mercury
Methanol [methyl alcohol]
Styrene
Toluene
Xylenes, mixed isomers [Xylenes]

Facilities having 8 chemicals with neurological effects

Facility 118
Carbon disulfide
Cresols
Cyanide
Manganese
Mercury
Methanol [methyl alcohol]
Methyl isobutyl ketone [Hexone] [4-Methyl-2-pentanone] [MIBK]
Xylenes, mixed isomers [Xylenes]

(continued)

Table B-29. (continued)

Facilities having 7 chemicals with neurological effects

Facility 021
n-Butyl alcohol [n-Butanol]
o-Cresol [2-Methyl phenol]
p-Cresol [4-Methyl phenol]
Methanol [methyl alcohol]
Styrene
Toluene
Xylenes, mixed isomers [Xylenes]

Facility 041
Carbon disulfide
Cresols
n-Hexane
Manganese
Methanol [methyl alcohol]
Styrene
Xylenes, mixed isomers [Xylenes]

Facility 157
Cyanide
Manganese
Mercury
Toluene
m-Xylene
o-Xylene
p-Xylene

Facilities having 6 chemicals with neurological effects

Facility 046
2,6-Dinitrotoluene
Manganese
Mercury
Methanol [methyl alcohol]
Styrene
Toluene

Facility 091
o-Cresol [2-Methyl phenol]
p-Cresol [4-Methyl phenol]
2,4-Dimethylphenol
Mercury
Toluene
Xylenes, mixed isomers [Xylenes]

Facility 156
Carbon disulfide
Cresols
n-Hexane
Manganese
Methanol [methyl alcohol]
Methyl isobutyl ketone [Hexone] [4-Methyl-2-pentanone] [MIBK]

Facility 179
n-Butyl alcohol [n-Butanol]
Cyanide
Mercury
m-Xylene

(continued)

Table B-29. (continued)

o-Xylene
p-Xylene

Facilities having 5 chemicals with neurological effects

Facility 103
Carbon disulfide
Cresols
Manganese
Methanol [methyl alcohol]
Methyl isobutyl ketone [Hexone] [4-Methyl-2-pentanone] [MIBK]

Facility 130
m-Cresol [3-Methyl phenol]
o-Cresol [2-Methyl phenol]
p-Cresol [4-Methyl phenol]
Cresols
Mercury

Facility 148
m-Cresol [3-Methyl phenol]
o-Cresol [2-Methyl phenol]
p-Cresol [4-Methyl phenol]
2,4-Dinitrotoluene
Endrin

Facilities having 4 chemicals with neurological effects

Facility 018
Manganese
Toluene
o-Xylene
Xylenes, mixed isomers [Xylenes]

Facility 105
n-Butyl alcohol [n-Butanol]
Methanol [methyl alcohol]
Styrene
Toluene

Facility 137
n-Butyl alcohol [n-Butanol]
Cyanide
Isobutyl alcohol [Isobutanol]
Methanol [methyl alcohol]

Facility 159
Cyanide
Mercury
Toluene
Xylenes, mixed isomers [Xylenes]

Facility 173
Cresols
Manganese
Methanol [methyl alcohol]
Toluene

Facility 174
Manganese

(continued)

Table B-29. (continued)

Mercury
Toluene
Xylenes, mixed isomers [Xylenes]

Facility 180
Carbon disulfide
Manganese
Mercury
Toluene

Facility 183
Methanol [methyl alcohol]
Styrene
Toluene
Xylenes, mixed isomers [Xylenes]

Facilities having 3 chemicals with neurological effects

Facility 022
2,4-Dimethylphenol
Manganese
Methanol [methyl alcohol]

Facility 036
Cyanide
Manganese
Mercury

Facility 037
Mercury
Toluene
Xylenes, mixed isomers [Xylenes]

Facility 043
p-Cresol [4-Methyl phenol]
Manganese
Toluene

Facility 077
Manganese
Methanol [methyl alcohol]
Toluene

Facility 088
Manganese
Mercury
Methanol [methyl alcohol]

Facility 126
Cyanide
Manganese
Mercury

Facility 127
Cresols
Manganese
Methanol [methyl alcohol]

Facility 128
Mercury

(continued)

Table B-29. (continued)

Toluene
Xylenes, mixed isomers [Xylenes]

Facility 158
n-Butyl alcohol [n-Butanol]
Methanol [methyl alcohol]
Toluene

Facilities having 2 chemicals with neurological effects

Facility 005
Manganese
Mercury

Facility 006
Mercury
Methanol [methyl alcohol]

Facility 013
Toluene
Xylenes, mixed isomers [Xylenes]

Facility 023
Cyanide
Methanol [methyl alcohol]

Facility 032
Cyanide
Manganese

Facility 035
Toluene
Xylenes, mixed isomers [Xylenes]

Facility 038
Manganese
Methanol [methyl alcohol]

Facility 039
Allyl chloride
Methanol [methyl alcohol]

Facility 053
Manganese
Methanol [methyl alcohol]

Facility 080
Manganese
Mercury

Facility 084
Manganese
Methanol [methyl alcohol]

Facility 089
Cyanide
Manganese

(continued)

Table B-29. (continued)

Facility 090
Cyanide
Manganese

Facility 104
Cyanide
Toluene

Facility 119
Cyanide
Manganese

Facility 123
Manganese
Mercury

Facility 135
Cyanide
Manganese

Facility 151
Carbon disulfide
Cresols

Facility 160
Mercury
Toluene

Facility 164
Manganese
Mercury

Facility 185
Cyanide
Methanol [methyl alcohol]

Facility 187
Manganese
Mercury

Facility 189
Toluene
Xylenes, mixed isomers [Xylenes]

Facility 191
Cyanide
Methanol [methyl alcohol]

Facility 193
Toluene
Xylenes, mixed isomers [Xylenes]

(continued)

Table B-29. (continued)

Organ weight

Facilities having 2 chemicals with organ weight effects

Facility 068
Diethyl phthalate [DEP]
Nickel

Facility 158
Diethyl phthalate [DEP]
Nickel

Reproductive

Facilities having 2 chemicals with reproductive effects

Facility 012
Acrylonitrile
Barium

Facility 021
Acrylic acid [propenoic acid]
Barium

Facility 041
Barium
n-Hexane

Facility 046
Acrylonitrile
Barium

Facility 068
Barium
Ethylene dibromide [1,2-Dibromoethane]

Facility 103
Barium
2-Chlorophenol [o-Chlorophenol]

Facility 151
Barium
Methoxychlor

Facility 156
Barium
n-Hexane

Facility 160
Barium
2-Chlorophenol [o-Chlorophenol]

(continued)

Table B-29. (continued)

Respiratory

Facilities having 5 chemicals with respiratory effects

Facility 021
Acetaldehyde [Ethanal]
Acrylic acid [propenoic acid]
p-Cresol [4-Methyl phenol]
Naphthalene
Toluene

Facility 068
Beryllium
p-Cresol [4-Methyl phenol]
Naphthalene
Selenium
Toluene

Facility 091
Beryllium
p-Cresol [4-Methyl phenol]
Naphthalene
Selenium
Toluene

Facility 103
Acetaldehyde [Ethanal]
Beryllium
Naphthalene
Selenium
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]

Facilities having 4 chemicals with respiratory effects

Facility 012
Acrolein [2-propenal]
Acrylonitrile
Beryllium
Selenium

Facility 046
Acrylonitrile
1,2-Dichloropropane [Propylene dichloride]
Naphthalene
Toluene

Facility 105
Acrylic acid [propenoic acid]
Naphthalene
Toluene
Vinyl acetate

Facility 118
Acetaldehyde [Ethanal]
Beryllium
Selenium
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]

(continued)

Table B-29. (continued)

Facilities having 3 chemicals with respiratory effects

Facility 023
Acetaldehyde [Ethanal]
Selenium
Triethylamine

Facility 037
Naphthalene
Selenium
Toluene

Facility 104
1,2-Dichloropropane [Propylene dichloride]
Naphthalene
Toluene

Facility 156
Acetaldehyde [Ethanal]
n-Hexane
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]

Facility 173
Acetaldehyde [Ethanal]
Naphthalene
Toluene

Facility 174
Beryllium
Selenium
Toluene

Facilities having 2 chemicals with respiratory effects

Facility 013
Chloroprene [2-Chloro-1,3-butadiene]
Toluene

Facility 022
Acetaldehyde [Ethanal]
Furfural

Facility 035
Naphthalene
Toluene

Facility 038
Acetaldehyde [Ethanal]
2,3,7,8-TCDD [2,3,7,8-Tetrachlorodibenzo-p-dioxin]

Facility 041
Acetaldehyde [Ethanal]
n-Hexane

Facility 043
p-Cresol [4-Methyl phenol]
Toluene

Facility 085
Bromomethane [Methyl bromide]

(continued)

Table B-29. (continued)

Selenium

Facility 088
Acetaldehyde [Ethanal]
Selenium

Facility 130
p-Cresol [4-Methyl phenol]
Selenium

Facility 134
Acrylic acid [propenoic acid]
Propylene oxide [1,2-Epoxypropane]

Facility 135
Beryllium
Selenium

Facility 137
Acrylic acid [propenoic acid]
Methyl methacrylate

Facility 159
Selenium
Toluene

Facility 160
Beryllium
Toluene

Facility 185
Acrolein [2-propenal]
Epichlorohydrin [1-Chloro-2,3-epoxypropane]

Facility 191
Epichlorohydrin [1-Chloro-2,3-epoxypropane]
Vinyl acetate

Facility 193
Naphthalene
Toluene

Skin

Facilities having 2 chemicals with skin effects

Facility 004
Arsenic
Silver

Facility 012
Arsenic
Silver

Facility 014
Arsenic
Silver

(continued)

Table B-29. (continued)

Facility 037
Arsenic
Silver

Facility 068
Arsenic
Silver

Facility 103
Arsenic
Silver

Facility 118
Arsenic
Silver

Facility 157
Arsenic
Silver

Facility 159
Arsenic
Silver

Facility 160
Arsenic
Silver

Vascular

Facilities having 2 chemicals with vascular effects

Facility 134
1,2-Dichloroethane [Ethylene dichloride]
Propylene oxide [1,2-Epoxypropane]

Table B-30. Facility-Level Co-occurance of Chemicals in Wastewater by Human Health Effect (Survey Database)

Target Health Effect [a]	Estimated Number of Facilities with Co-occurrences [b] in Wastewater [c]				
	Number of Chemicals Co-occurring Within/Across Impoundments [d]				All Facilities with 2 or More Co-occurrences
	2-3	4-6	7-10	11-20	
Cancer	621 (254)	328 (105)	390* (263)	30* (33)	1,369 (328)
Adrenal	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Bladder	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Body weight	984 (414)	193 (83)	13* (22)	0 (0)	1,191 (405)
Brain	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Cardiovascular	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Death	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Developmental	635 (220)	11* (21)	0 (0)	0 (0)	646 (220)
Eyes	13* (22)	0 (0)	0 (0)	0 (0)	13* (22)
Forestomach	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Gastrointestinal	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
General	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Hematological	1,246 (289)	76* (53)	11* (20)	0 (0)	1,334 (291)
Kidney	1,099 (379)	799 (220)	111* (67)	11* (20)	2,020 (412)
Leukemia	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Liver	972 (390)	339 (107)	212* (171)	221* (200)	1,743 (417)
Lung	766 (260)	64* (49)	0 (0)	0 (0)	830 (263)
Mammary	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Nasal cavity	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Neurological	873 (329)	696 (285)	73* (55)	10* (19)	1,653 (414)
Organ weight	13* (22)	0 (0)	0 (0)	0 (0)	13* (22)
Reproductive	123* (68)	0 (0)	0 (0)	0 (0)	123* (68)
Respiratory	832 (364)	131* (69)	0 (0)	0 (0)	962 (369)
Respiratory tract	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Skin	238 (96)	0 (0)	0 (0)	0 (0)	238 (96)
Spleen	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Stomach	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Thyroid	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Vascular	6* (15)	0 (0)	0 (0)	0 (0)	6* (15)

[a] For noncarcinogenic chemicals, target organ on which health benchmark (e.g., RfD) is based. Cancer or leukemia for carcinogenic chemicals. See Appendix C for discussion of health benchmarks.

[b] A facility-level co-occurrence is defined as when two or more chemicals with a common target health effect occur within or across impoundments at a single facility.

[c] Estimate for population of facilities with surface impoundments having constituents or pH of concern. Value in parentheses is standard error. Asterisk (*) indicates estimates that may not be reliable because of a large relative standard error (see Appendix A.5 for a discussion of standard error estimates).

[d] Lists of the co-occurring chemicals at each facility in the sample are provided in Appendix B.

Table B-31. Facility-Level Co-occurance of Chemicals in Sludge by Human Health Effect (Survey Database)

Target Health Effect [a]	Estimated Number of Facilities with Co-occurrences [b] in Sludge [c]				
	Number of Chemicals Co-occurring Within/Across Impoundments [d]				All Facilities with 2 or More Co-occurrences
	2-3	4-6	7-10	11-20	
Cancer	595 (220)	107* (64)	126* (69)	155* (136)	983 (245)
Adrenal	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Bladder	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Body weight	539 (186)	93* (60)	11* (20)	0 (0)	642 (180)
Brain	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Cardiovascular	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Death	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Developmental	314 (145)	10* (20)	0 (0)	0 (0)	324 (145)
Eyes	11* (21)	0 (0)	0 (0)	0 (0)	11* (21)
Forestomach	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Gastrointestinal	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
General	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Hematological	553 (170)	230* (140)	20* (28)	0 (0)	803 (198)
Kidney	737 (217)	424 (181)	71* (53)	10* (20)	1,242 (248)
Leukemia	54* (54)	0 (0)	0 (0)	0 (0)	54* (54)
Liver	475 (187)	72* (53)	82* (56)	147* (137)	776 (193)
Lung	1,064 (246)	51* (44)	0 (0)	0 (0)	1,116 (248)
Mammary	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Nasal cavity	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Neurological	530 (163)	210* (138)	189* (138)	10* (20)	939 (200)
Organ weight	11* (21)	0 (0)	0 (0)	0 (0)	11* (21)
Reproductive	221* (140)	0 (0)	0 (0)	0 (0)	221* (140)
Respiratory	444 (150)	234* (139)	0 (0)	0 (0)	678 (181)
Respiratory tract	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Skin	324 (109)	0 (0)	0 (0)	0 (0)	324 (109)
Spleen	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Stomach	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Thyroid	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Vascular	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Cancer	595 (220)	107* (64)	126* (69)	155* (136)	0 (0)
Adrenal	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Bladder	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

(continued)

Table B-31. (continued)

Target Health Effect [a]	Estimated Number of Facilities with Co-occurrences [b] in Sludge [c]				
	Number of Chemicals Co-occurring Within/Across Impoundments [d]				All Facilities with 2 or More Co-occurrences
	2-3	4-6	7-10	11-20	
Body weight	539 (186)	93* (60)	11* (20)	0 (0)	0 (0)
Brain	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Cardiovascular	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Death	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Developmental	314 (145)	10* (20)	0 (0)	0 (0)	0 (0)
Eyes	11* (21)	0 (0)	0 (0)	0 (0)	0 (0)
Forestomach	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Gastrointestinal	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
General	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Hematological	553 (170)	230* (140)	20* (28)	0 (0)	0 (0)
Kidney	737 (217)	424 (181)	71* (53)	10* (20)	0 (0)
Leukemia	54* (54)	0 (0)	0 (0)	0 (0)	0 (0)
Liver	475 (187)	72* (53)	82* (56)	147* (137)	0 (0)
Lung	1,064 (246)	51* (44)	0 (0)	0 (0)	0 (0)
Mammary	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Nasal cavity	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Neurological	530 (163)	210* (138)	189* (138)	10* (20)	0 (0)
Organ weight	11* (21)	0 (0)	0 (0)	0 (0)	0 (0)
Reproductive	221* (140)	0 (0)	0 (0)	0 (0)	0 (0)
Respiratory	444 (150)	234* (139)	0 (0)	0 (0)	0 (0)
Respiratory tract	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Skin	324 (109)	0 (0)	0 (0)	0 (0)	0 (0)
Spleen	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Stomach	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Thyroid	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Vascular	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

[a] For noncarcinogenic chemicals, target organ on which health benchmark (e.g., RfD) is based. Cancer or leukemia for carcinogenic chemicals. See Appendix C for discussion of health benchmarks.
[b] A facility-level co-occurrence is defined as when two or more chemicals with a common target health effect occur within or across impoundments at a single facility.
[c] Estimate for population of facilities with surface impoundments having constituents or pH of concern. Value in parentheses is standard error. Asterisk (*) indicates estimates that may not be reliable because of a large relative standard error (see Appendix A.5 for a discussion of standard error estimates).
[d] Lists of the co-occurring chemicals at each facility in the sample are provided in Appendix B.

Table B-32. Impoundment-Level Co-occurance of Chemicals in Wastewater by Human Health Effect (Survey Database)

Target Health Effect [a]	Estimated Number of Impoundments with Co-occurrences [b] in Wastewater [c]				
	Number of Chemicals Co-occurring Within/Across Impoundments				All Impoundments with 2 or More Co-occurrences
	2-3	4-6	7-10	11-20	
Cancer	1,230 (237)	670 (129)	536* (273)	25* (26)	2,461 (478)
Adrenal	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Bladder	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Body weight	2,061 (302)	573 (120)	11* (17)	0 (0)	2,646 (324)
Brain	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Cardiovascular	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Death	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Developmental	1,577 (363)	9* (15)	0 (0)	0 (0)	1,586 (363)
Eyes	9* (15)	0 (0)	0 (0)	0 (0)	9* (15)
Forestomach	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Gastrointestinal	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
General	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Hematological	3,326 (658)	121 (56)	9* (15)	0 (0)	3,456 (662)
Kidney	2,749 (333)	2,043 (348)	72* (47)	9* (15)	4,873 (531)
Leukemia	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Liver	2,942 (282)	574 (120)	384* (206)	205* (180)	4,105 (427)
Lung	1,636 (325)	169 (67)	0 (0)	0 (0)	1,805 (329)
Mammary	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Nasal cavity	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Neurological	3,616 (258)	737 (302)	452 (107)	9* (15)	4,814 (411)
Organ weight	9* (15)	0 (0)	0 (0)	0 (0)	9* (15)
Reproductive	183 (69)	0 (0)	0 (0)	0 (0)	183 (69)
Respiratory	2,003 (272)	231 (78)	0 (0)	0 (0)	2,235 (285)
Respiratory tract	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Skin	485 (111)	0 (0)	0 (0)	0 (0)	485 (111)
Spleen	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Stomach	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Thyroid	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Vascular	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Cancer	1,230 (237)	670 (129)	536* (273)	25* (26)	0 (0)
Adrenal	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Bladder	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

(continued)

Table B-32. (continued)

Target Health Effect [a]	Estimated Number of Facilities with Co-occurrences [b] in Sludge [c]				
	Number of Chemicals Co-occurring Within/Across Impoundments [d]				All Facilities with 2 or More Co-occurrences
	2-3	4-6	7-10	11-20	
Body weight	2,061 (302)	573 (120)	11* (17)	0 (0)	0 (0)
Brain	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Cardiovascular	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Death	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Developmental	1,577 (363)	9* (15)	0 (0)	0 (0)	0 (0)
Eyes	9* (15)	0 (0)	0 (0)	0 (0)	0 (0)
Forestomach	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Gastrointestinal	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
General	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Hematological	3,326 (658)	121 (56)	9* (15)	0 (0)	0 (0)
Kidney	2,749 (333)	2,043 (348)	72* (47)	9* (15)	0 (0)
Leukemia	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Liver	2,942 (282)	574 (120)	384* (206)	205* (180)	0 (0)
Lung	1,636 (325)	169 (67)	0 (0)	0 (0)	0 (0)
Mammary	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Nasal cavity	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Neurological	3,616 (258)	737 (302)	452 (107)	9* (15)	0 (0)
Organ weight	9* (15)	0 (0)	0 (0)	0 (0)	0 (0)
Reproductive	183 (69)	0 (0)	0 (0)	0 (0)	0 (0)
Respiratory	2,003 (272)	231 (78)	0 (0)	0 (0)	0 (0)
Respiratory tract	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Skin	485 (111)	0 (0)	0 (0)	0 (0)	0 (0)
Spleen	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Stomach	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Thyroid	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Vascular	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

[a] For noncarcinogenic chemicals, target organ on which health benchmark (e.g., RfD) is based. Cancer or leukemia for carcinogenic chemicals. See Appendix C for discussion of health benchmarks.
[b] An impoundment-level co-occurrence is defined as when two or more chemicals with a common target health effect occur within or across a single impoundment.
[c] Estimate for population of impoundments having constituents or pH of concern. Value in parentheses is standard error. Asterisk (*) indicates estimates that may not be reliable because of a large relative standard error (see Appendix A.5 for a discussion of standard error estimates).

Table B-33. Impoundment-Level Co-occurance of Chemicals in Sludge by Human Health Effect (Survey Data)

Target Health Effect [a]	Estimated Number of Impoundments with Co-occurrences [b] in Sludge [c]				
	Number of Chemicals Co-occurring Within/Across Impoundments				All Impoundments with 2 or More Co-occurrences
	2-3	4-6	7-10	11-20	
Cancer	843 (250)	247 (83)	130 (60)	304* (168)	1,526 (348)
Adrenal	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Bladder	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Body weight	978 (356)	123 (59)	45* (36)	0 (0)	1,146 (390)
Brain	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Cardiovascular	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Death	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Developmental	571 (213)	45* (36)	0 (0)	0 (0)	616 (213)
Eyes	45* (36)	0 (0)	0 (0)	0 (0)	45* (36)
Forestomach	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Gastrointestinal	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
General	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Hematological	1,254 (178)	420 (204)	45* (36)	0 (0)	1,718 (273)
Kidney	1,966 (397)	1,033 (215)	81* (48)	45* (36)	3,125 (550)
Leukemia	46* (46)	0 (0)	0 (0)	0 (0)	46* (46)
Liver	1,054 (226)	124 (59)	106* (54)	296* (168)	1,580 (324)
Lung	1,969 (450)	139 (62)	0 (0)	0 (0)	2,108 (451)
Mammary	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Nasal cavity	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Neurological	1,546 (258)	380 (172)	297* (201)	45* (36)	2,268 (388)
Organ weight	45* (36)	0 (0)	0 (0)	0 (0)	45* (36)
Reproductive	378* (202)	0 (0)	0 (0)	0 (0)	378* (202)
Respiratory	666 (155)	381* (202)	0 (0)	0 (0)	1,047 (261)
Respiratory tract	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Skin	678 (134)	0 (0)	0 (0)	0 (0)	678 (134)
Spleen	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Stomach	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Thyroid	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Vascular	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

[a] For noncarcinogenic chemicals, target organ on which health benchmark (e.g., RfD) is based. Cancer or leukemia for carcinogenic chemicals. See Appendix C for discussion of health benchmarks.

[b] An impoundment-level co-occurrence is defined as when two or more chemicals with a common target health effect occur within or across a single impoundment.

[c] Estimate for population of impoundments having constituents or pH of concern. Value in parentheses is standard error. Asterisk (*) indicates estimates that may not be reliable because of a large relative standard error (see Appendix A.5 for a discussion of standard error estimates).

Table B-34. Facility-Level Co-occurance of Chemicals in Wastewater by Human Health Effect (Risk Input Database)

Target Health Effect [a]	Estimated Number of Facilities with Co-occurrences [b] in Wastewater [c]					
	Number of Chemicals Co-occurring Within/Across Impoundments [d]					All Facilities with 2 or More Co-occurrences
	2-3	4-6	7-10	11-20	>20	
Cancer	631 (253)	326 (103)	432* (261)	241* (172)	77* (51)	1,706 (322)
Adrenal	230* (174)	56* (46)	0 (0)	0 (0)	0 (0)	286* (175)
Bladder	34* (36)	46* (42)	0 (0)	0 (0)	0 (0)	80* (55)
Body weight	836 (376)	397 (187)	93* (58)	16* (24)	0 (0)	1,342 (403)
Brain	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Cardiovascular	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Death	6* (15)	0 (0)	0 (0)	0 (0)	0 (0)	6* (15)
Developmental	718 (223)	109* (63)	0 (0)	0 (0)	0 (0)	827 (223)
Eyes	18* (27)	0 (0)	0 (0)	0 (0)	0 (0)	18* (27)
Forestomach	63* (49)	12* (21)	0 (0)	0 (0)	0 (0)	74* (53)
Gastrointestinal	28* (33)	30* (34)	0 (0)	0 (0)	0 (0)	57* (47)
General	12* (21)	0 (0)	0 (0)	0 (0)	0 (0)	12* (21)
Hematological	1,278 (291)	268* (176)	65* (49)	60* (47)	0 (0)	1,671 (270)
Kidney	1,557 (480)	556 (202)	331 (160)	38* (36)	46* (40)	2,528 (470)
Leukemia	114* (65)	0 (0)	0 (0)	0 (0)	0 (0)	114* (65)
Liver	916 (367)	379 (111)	348* (213)	282* (201)	68* (49)	1,993 (415)
Lung	1,270 (369)	101* (60)	45* (41)	0 (0)	0 (0)	1,416 (370)
Mammary	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Nasal cavity	12* (21)	0 (0)	0 (0)	0 (0)	0 (0)	12* (21)
Neurological	842 (330)	569 (262)	264* (177)	94* (57)	5* (13)	1,774 (414)
Organ weight	274* (177)	0 (0)	0 (0)	0 (0)	0 (0)	274* (177)
Reproductive	185 (82)	37* (37)	0 (0)	0 (0)	0 (0)	222 (90)
Respiratory	1,009 (377)	200 (83)	10* (19)	61* (47)	0 (0)	1,280 (383)
Respiratory tract	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Skin	680 (261)	0 (0)	0 (0)	0 (0)	0 (0)	680 (261)
Spleen	30* (34)	0 (0)	0 (0)	0 (0)	0 (0)	30* (34)
Stomach	23* (30)	0 (0)	0 (0)	0 (0)	0 (0)	23* (30)
Thyroid	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Vascular	85* (57)	0 (0)	0 (0)	0 (0)	0 (0)	85* (57)

[a] For noncarcinogenic chemicals, target organ on which health benchmark (e.g., RfD) is based. Cancer or leukemia for carcinogenic chemicals. See Appendix C for discussion of health benchmarks.
[b] A facility-level co-occurrence is defined as when two or more chemicals with a common target health effect occur within or across impoundments at a single facility.
[c] Estimate for population of facilities with surface impoundments having constituents or pH of concern. Value in parentheses is standard error. Asterisk (*) indicates estimates that may not be reliable because of a large relative standard error (see Appendix A.5 for a discussion of standard error estimates).
[d] Lists of the co-occurring chemicals at each facility in the sample are provided in Appendix B.

Table B-35. Facility-Level Co-occurance of Chemicals in Sludge by Human Health Effect (Risk Input Database)

Target Health Effect [a]	Estimated Number of Facilities with Co-occurrences [b] in Sludge [c]					
	Number of Chemicals Co-occurring Within/Across Impoundments [d]					All Facilities with 2 or More Co-occurrences
	2-3	4-6	7-10	11-20	>20	
Cancer	552 (203)	237 (85)	92* (54)	246* (129)	191* (125)	1,318 (238)
Adrenal	41* (37)	165* (126)	0 (0)	0 (0)	0 (0)	207* (127)
Bladder	12* (20)	161* (126)	0 (0)	0 (0)	0 (0)	173* (126)
Body weight	371 (138)	154 (69)	112* (59)	136* (124)	0 (0)	773 (172)
Brain	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Cardiovascular	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Death	129* (125)	0 (0)	0 (0)	0 (0)	0 (0)	129* (125)
Developmental	416 (141)	205* (128)	0 (0)	0 (0)	0 (0)	621 (169)
Eyes	13* (20)	0 (0)	0 (0)	0 (0)	0 (0)	13* (20)
Forestomach	161* (126)	8* (16)	0 (0)	0 (0)	0 (0)	169* (126)
Gastrointestinal	144* (125)	21* (26)	0 (0)	0 (0)	0 (0)	165* (126)
General	8* (16)	0 (0)	0 (0)	0 (0)	0 (0)	8* (16)
Hematological	560 (156)	250* (130)	49* (40)	173* (126)	0 (0)	1,033 (191)
Kidney	894 (290)	329 (140)	274 (130)	40* (36)	162* (124)	1,700 (328)
Leukemia	259 (129)	0 (0)	0 (0)	0 (0)	0 (0)	259 (129)
Liver	403 (144)	256 (88)	44* (38)	239* (128)	176* (125)	1,118 (192)
Lung	1,049 (223)	253* (133)	36* (34)	0 (0)	0 (0)	1,338 (228)
Mammary	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Nasal cavity	8* (16)	0 (0)	0 (0)	0 (0)	0 (0)	8* (16)
Neurological	326 (98)	266 (130)	245* (132)	198* (127)	4* (11)	1,039 (187)
Organ weight	207* (128)	0 (0)	0 (0)	0 (0)	0 (0)	207* (128)
Reproductive	386 (159)	30* (31)	0 (0)	0 (0)	0 (0)	416 (159)
Respiratory	431 (140)	341 (138)	8* (16)	164* (125)	0 (0)	944 (183)
Respiratory tract	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Skin	558 (126)	0 (0)	0 (0)	0 (0)	0 (0)	558 (126)
Spleen	21* (26)	0 (0)	0 (0)	0 (0)	0 (0)	21* (26)
Stomach	8* (16)	0 (0)	0 (0)	0 (0)	0 (0)	8* (16)
Thyroid	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Vascular	190* (126)	0 (0)	0 (0)	0 (0)	0 (0)	190* (126)

[a] For noncarcinogenic chemicals, target organ on which health benchmark (e.g., RfD) is based. Cancer or leukemia for carcinogenic chemicals. See Appendix C for discussion of health benchmarks.
[b] A facility-level co-occurrence is defined as when two or more chemicals with a common target health effect occur within or across impoundments at a single facility.
[c] Estimate for population of facilities with surface impoundments having constituents or pH of concern. Value in parentheses is standard error. Asterisk (*) indicates estimates that may not be reliable because of a large relative standard error (see Appendix A.5 for a discussion of standard error estimates).
[d] Lists of the co-occurring chemicals at each facility in the sample are provided in Appendix B.

Table B-36. Impoundment-Level Co-occurance of Chemicals in Wastewater by Human Health Effect (Risk Input Database)

Target Health Effect [a]	Estimated Number of Impoundments with Co-occurrences [b] in Wastewater [c]					
	Number of Chemicals Co-occurring Within/Across Impoundments					All Impoundments with 2 or More Co-occurrences
	2-3	4-6	7-10	11-20	>20	
Cancer	1,004 (223)	959 (153)	709 (278)	326 (160)	175 (67)	3,172 (577)
Adrenal	243* (155)	114 (55)	0 (0)	0 (0)	0 (0)	358 (158)
Bladder	72* (44)	102* (52)	0 (0)	0 (0)	0 (0)	175 (67)
Body weight	2,144 (280)	811 (168)	157 (64)	50* (36)	0 (0)	3,161 (361)
Brain	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Cardiovascular	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Death	4* (11)	0 (0)	0 (0)	0 (0)	0 (0)	4* (11)
Developmental	1,763 (375)	181 (69)	0 (0)	0 (0)	0 (0)	1,944 (391)
Eyes	52* (37)	0 (0)	0 (0)	0 (0)	0 (0)	52* (37)
Forestomach	116 (55)	42* (33)	0 (0)	0 (0)	0 (0)	158 (64)
Gastrointestinal	86* (47)	46* (35)	0 (0)	0 (0)	0 (0)	132 (59)
General	42* (33)	0 (0)	0 (0)	0 (0)	0 (0)	42* (33)
Hematological	3,293 (656)	429 (172)	101* (52)	131 (59)	0 (0)	3,954 (771)
Kidney	3,418 (568)	1,887 (264)	496 (173)	122 (57)	114 (55)	6,038 (824)
Leukemia	189 (70)	0 (0)	0 (0)	0 (0)	0 (0)	189 (70)
Liver	2,798 (307)	924 (150)	486* (327)	389 (188)	148 (62)	4,744 (492)
Lung	2,403 (537)	359 (96)	105 (53)	0 (0)	0 (0)	2,868 (555)
Mammary	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Nasal cavity	42* (33)	0 (0)	0 (0)	0 (0)	0 (0)	42* (33)
Neurological	3,578 (257)	747 (257)	665 (156)	191 (71)	4* (11)	5,186 (444)
Organ weight	359 (160)	0 (0)	0 (0)	0 (0)	0 (0)	359 (160)
Reproductive	257 (82)	102* (52)	0 (0)	0 (0)	0 (0)	360 (96)
Respiratory	2,116 (367)	793 (140)	17* (21)	131 (59)	0 (0)	3,057 (408)
Respiratory tract	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Skin	1,415 (258)	0 (0)	0 (0)	0 (0)	0 (0)	1,415 (258)
Spleen	55* (38)	0 (0)	0 (0)	0 (0)	0 (0)	55* (38)
Stomach	50* (36)	0 (0)	0 (0)	0 (0)	0 (0)	50* (36)
Thyroid	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Vascular	149 (62)	0 (0)	0 (0)	0 (0)	0 (0)	149 (62)

[a] For noncarcinogenic chemicals, target organ on which health benchmark (e.g., RfD) is based. Cancer or leukemia for carcinogenic chemicals. See Appendix C for discussion of health benchmarks.

[b] An impoundment-level co-occurrence is defined as when two or more chemicals with a common target health effect occur within or across a single impoundment.

[c] Estimate for population of impoundments having constituents or pH of concern. Value in parentheses is standard error. Asterisk (*) indicates estimates that may not be reliable because of a large relative standard error (see Appendix A.5 for a discussion of standard error estimates).

Table B-37. Impoundment-Level Co-occurance of Chemicals in Sludge by Human Health Effect (Risk Input Database)

Target Health Effect [a]	Estimated Number of Impoundments with Co-occurrences [b] in Sludge [c]					
	Number of Chemicals Co-occurring Within/Across Impoundments					All Impoundments with 2 or More Co-occurrences
	2-3	4-6	7-10	11-20	>20	
Cancer	930 (247)	816 (135)	267 (79)	568 (278)	280 (126)	2,861 (493)
Adrenal	229* (124)	214* (122)	0 (0)	0 (0)	0 (0)	443 (166)
Bladder	53* (36)	207* (122)	0 (0)	0 (0)	0 (0)	260 (124)
Body weight	885 (211)	605 (144)	184 (66)	165* (121)	0 (0)	1,838 (413)
Brain	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Cardiovascular	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Death	124* (121)	0 (0)	0 (0)	0 (0)	0 (0)	124* (121)
Developmental	1,372 (302)	306 (127)	0 (0)	0 (0)	0 (0)	1,677 (382)
Eyes	47* (33)	0 (0)	0 (0)	0 (0)	0 (0)	47* (33)
Forestomach	208* (123)	37* (30)	0 (0)	0 (0)	0 (0)	246* (124)
Gastrointestinal	189* (122)	41* (31)	0 (0)	0 (0)	0 (0)	230* (123)
General	37* (30)	0 (0)	0 (0)	0 (0)	0 (0)	37* (30)
Hematological	1,664 (229)	667 (284)	94* (47)	230* (123)	0 (0)	2,654 (565)
Kidney	2,134 (358)	1,103 (224)	702 (289)	125 (55)	214* (122)	4,278 (620)
Leukemia	349 (166)	0 (0)	0 (0)	0 (0)	0 (0)	349 (166)
Liver	1,421 (252)	661 (123)	168* (122)	487 (197)	241* (123)	2,978 (425)
Lung	2,087 (448)	453 (138)	87* (46)	0 (0)	0 (0)	2,627 (541)
Mammary	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Nasal cavity	37* (30)	0 (0)	0 (0)	0 (0)	0 (0)	37* (30)
Neurological	1,630 (243)	389 (104)	771 (280)	287 (127)	4* (9)	3,081 (536)
Organ weight	429 (165)	0 (0)	0 (0)	0 (0)	0 (0)	429 (165)
Reproductive	575* (296)	92* (47)	0 (0)	0 (0)	0 (0)	667 (298)
Respiratory	888 (185)	900 (221)	15* (19)	222* (123)	0 (0)	2,024 (421)
Respiratory tract	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Skin	1,265 (185)	0 (0)	0 (0)	0 (0)	0 (0)	1,265 (185)
Spleen	49* (34)	0 (0)	0 (0)	0 (0)	0 (0)	49* (34)
Stomach	37* (30)	0 (0)	0 (0)	0 (0)	0 (0)	37* (30)
Thyroid	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Vascular	277 (124)	0 (0)	0 (0)	0 (0)	0 (0)	277 (124)

[a] For noncarcinogenic chemicals, target organ on which health benchmark (e.g., RfD) is based. Cancer or leukemia for carcinogenic chemicals. See Appendix C for discussion of health benchmarks.

[b] An impoundment-level co-occurrence is defined as when two or more chemicals with a common target health effect occur within or across a single impoundment.

[c] Estimate for population of impoundments having constituents or pH of concern. Value in parentheses is standard error. Asterisk (*) indicates estimates that may not be reliable because of a large relative standard error (see Appendix A.5 for a discussion of standard error estimates).

Table B-38. 50th and 90th Percentile Wastewater Concentrations in Impoundment for Selected Chemicals

Chemical	Screening Factor [a]		TC Limit [b] (mg/L)	Wastewater Concentrations in Impoundment (mg/L)			
				Survey Data		Risk Input Data	
	Carcinogen (mg/L)	Noncarcinogen (mg/L)		50th Percentile	90th Percentile	50th Percentile	90th Percentile
Arsenic (7440-38-2)	6.6E-04	6.9E-03	5.0	9.0E-03	2.1E-02	9.0E-03	1.0E+00
Barium (7440-39-3)	NA	1.6E+00	100.0	1.3E-01	8.8E-01	3.0E-01	8.4E+00
Benzene (71-43-2)	1.8E-02	NA	0.5	1.1E-02	1.6E-02	5.3E-03	1.0E-01
Cadmium (7440-43-9)	NA	1.2E-02	1.0	3.0E-03	8.4E-03	3.1E-03	1.5E-01
Chloroform (67-66-3)	1.6E-01	2.3E-01	6.0	4.0E-03	2.8E+00	5.0E-03	2.8E+00
Chromium (7440-47-3)	NA	6.9E-02	5.0	8.0E-03	4.8E-02	1.6E-02	4.6E-01
Cresol (1319-77-3)	NA	1.2E+00	200.0	1.2E-02	3.1E-02	1.0E-02	1.1E-01
Lead (7439-92-1)	NA	NA	5.0	9.0E-03	4.0E-02	2.0E-02	4.0E-01
Mercury (7439-97-6)	NA	6.9E-03	0.2	6.0E-05	3.8E-03	2.0E-04	6.0E-03
Methyl Ethyl Ketone (78-93-3)	NA	1.4E+01	200.0	3.2E-01	1.4E+00	1.4E+00	2.1E+00
Selenium (7782-49-2)	NA	1.2E-01	1.0	5.5E-03	6.0E-02	1.0E-02	7.5E-01

[a] Human health based screening level (HBL) for drinking water (see Appendix C, Attachment 3).
[b] Source: RCRA §261.24, Table 1 – Maximum Concentration of Contaminants for the Toxicity Characteristic.

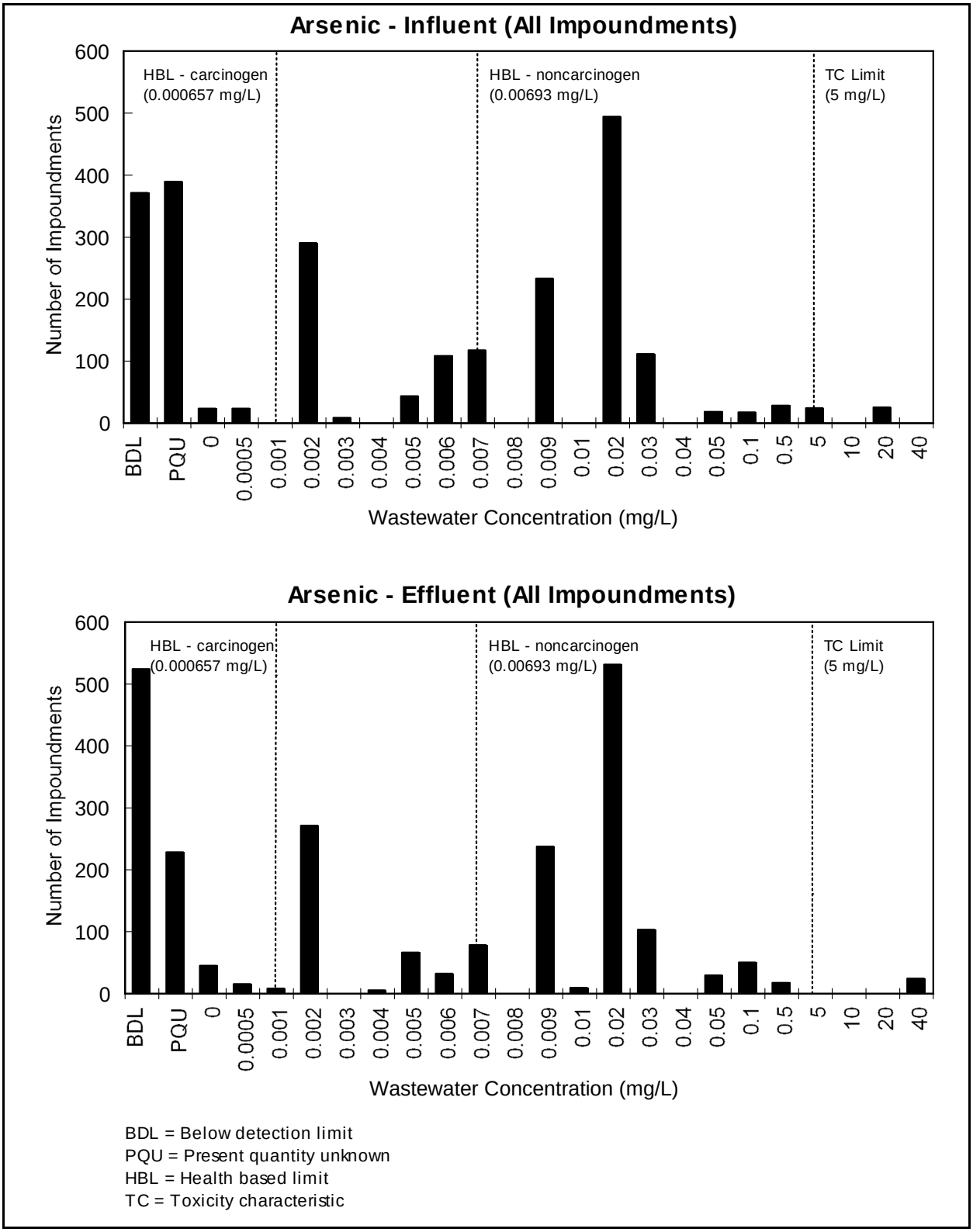

Figure B-1. Arsenic influent and effluent wastewater concentrations.

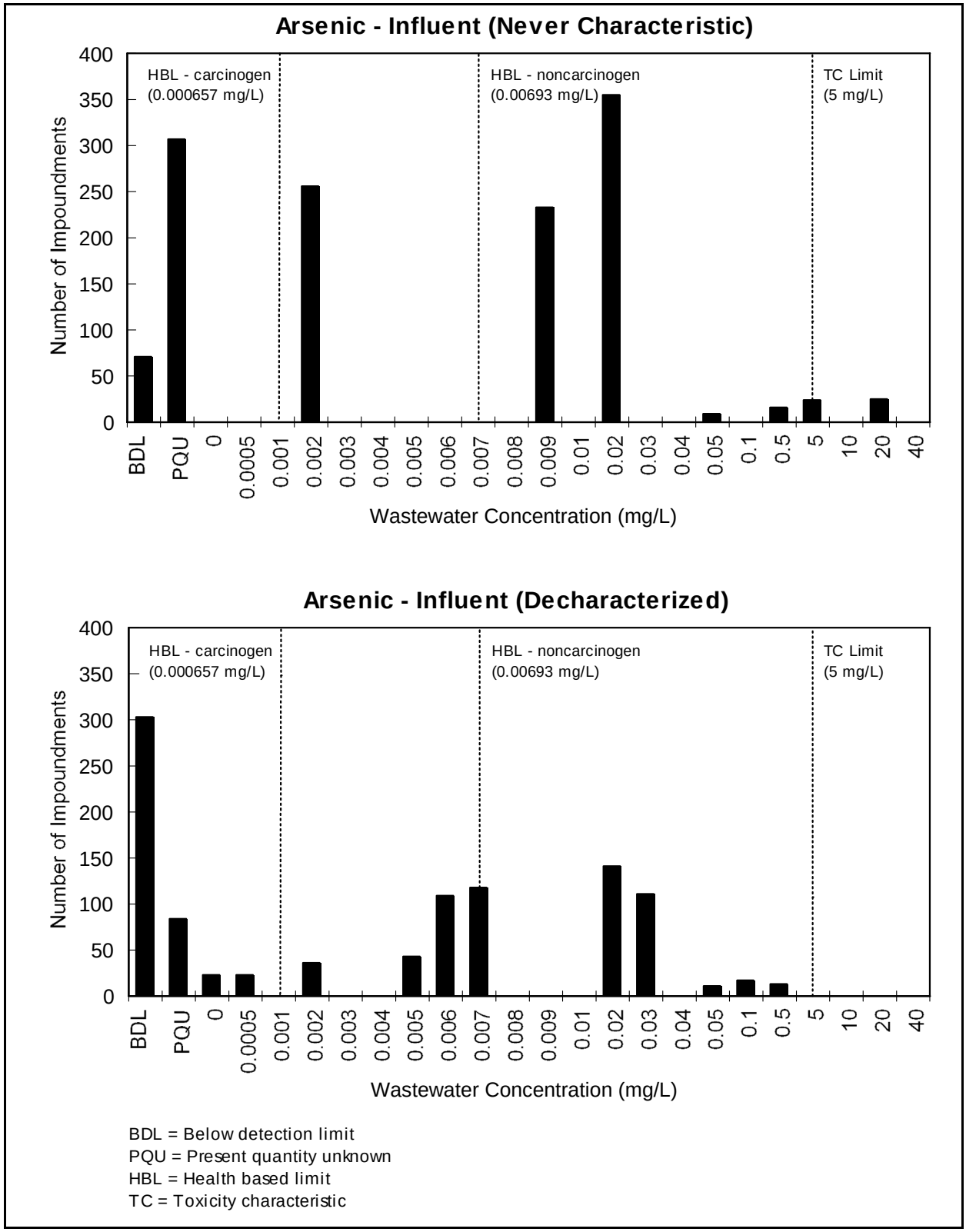

Figure B-2. Arsenic influent wastewater concentrations by decharacterization status.

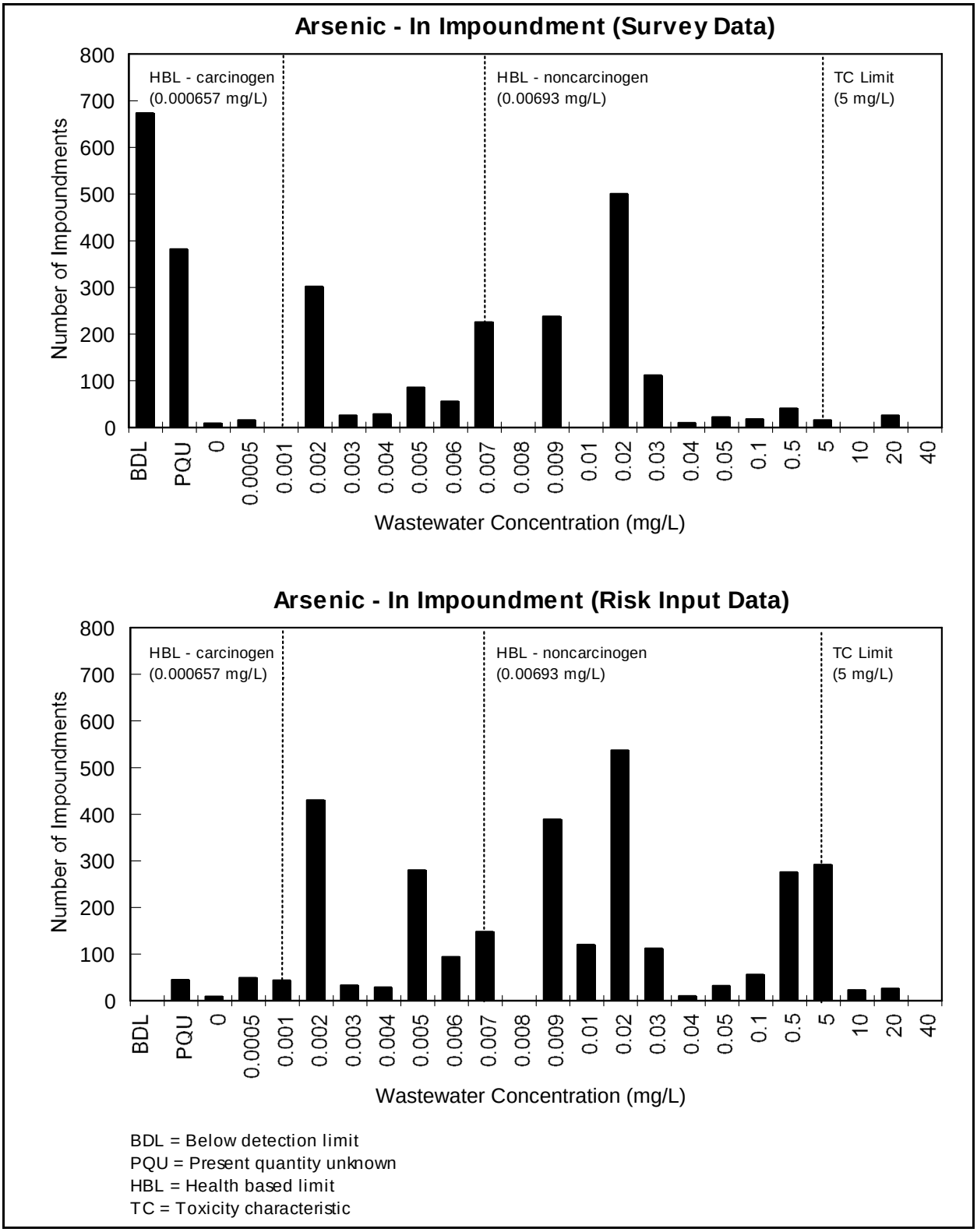

Figure B-3. Arsenic wastewater concentrations in impoundment (survey data vs. risk input data).

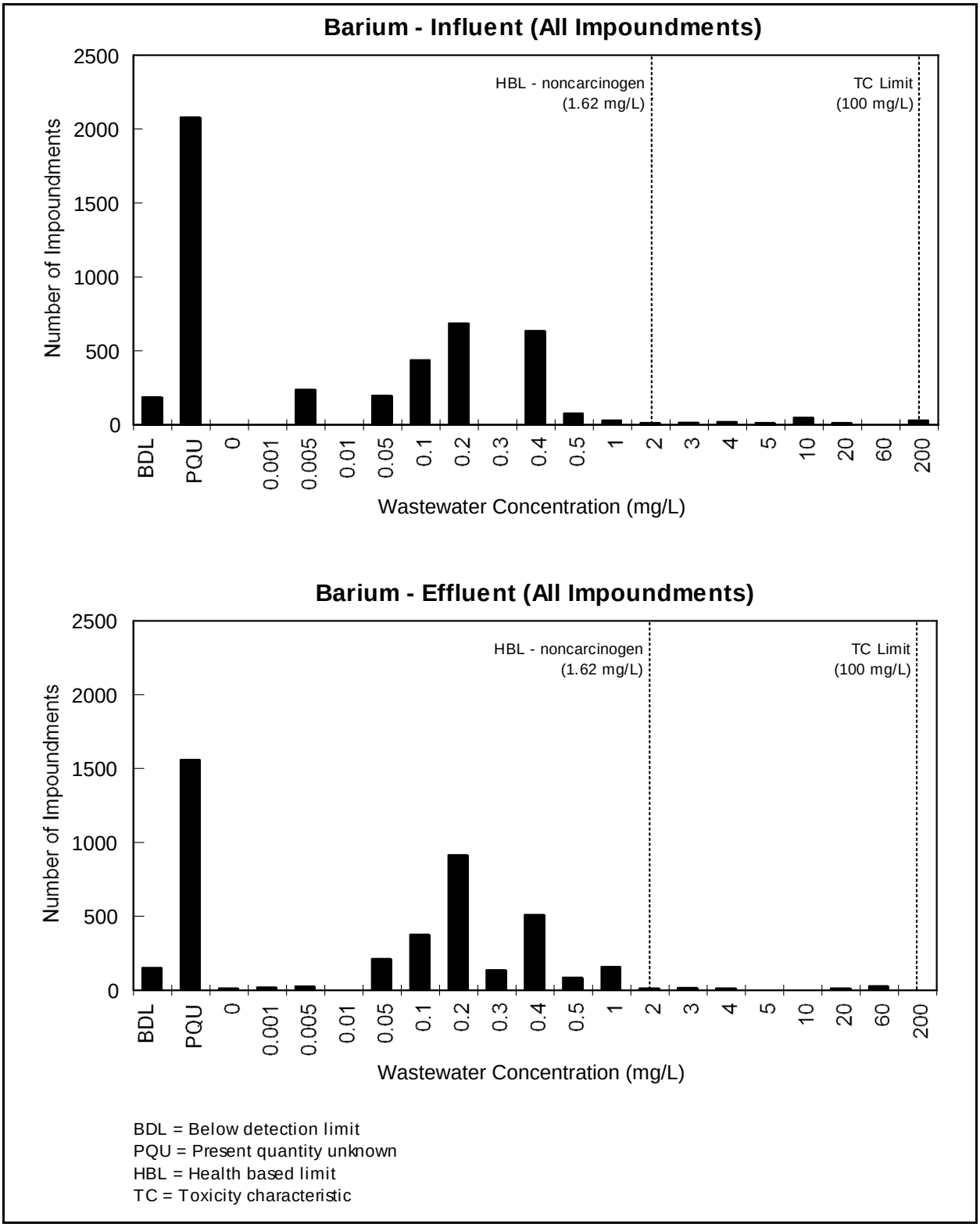

Figure B-4. Barium influent and effluent wastewater concentrations.

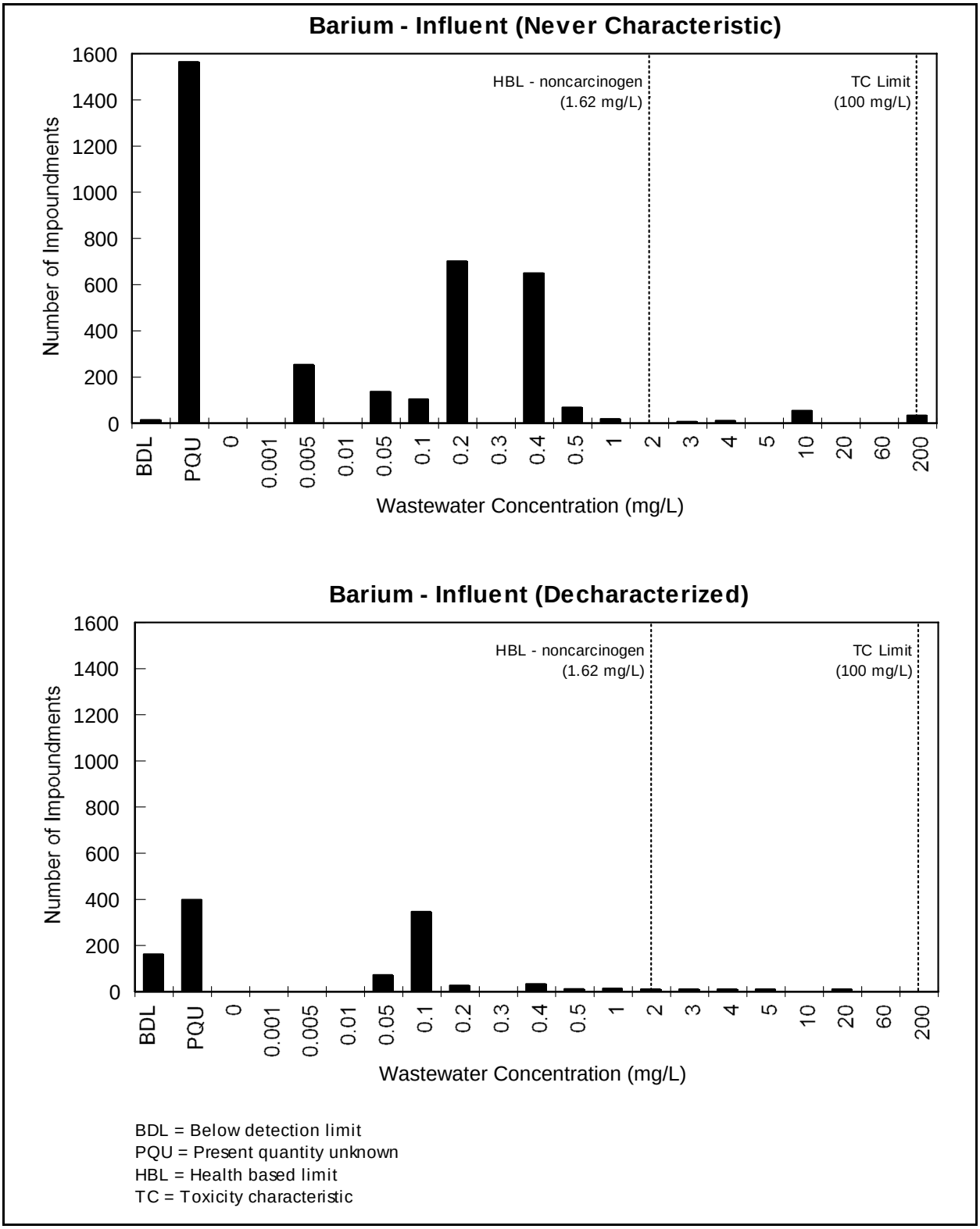

Figure B-5. Barium influent wastewater concentrations by decharacterization status.

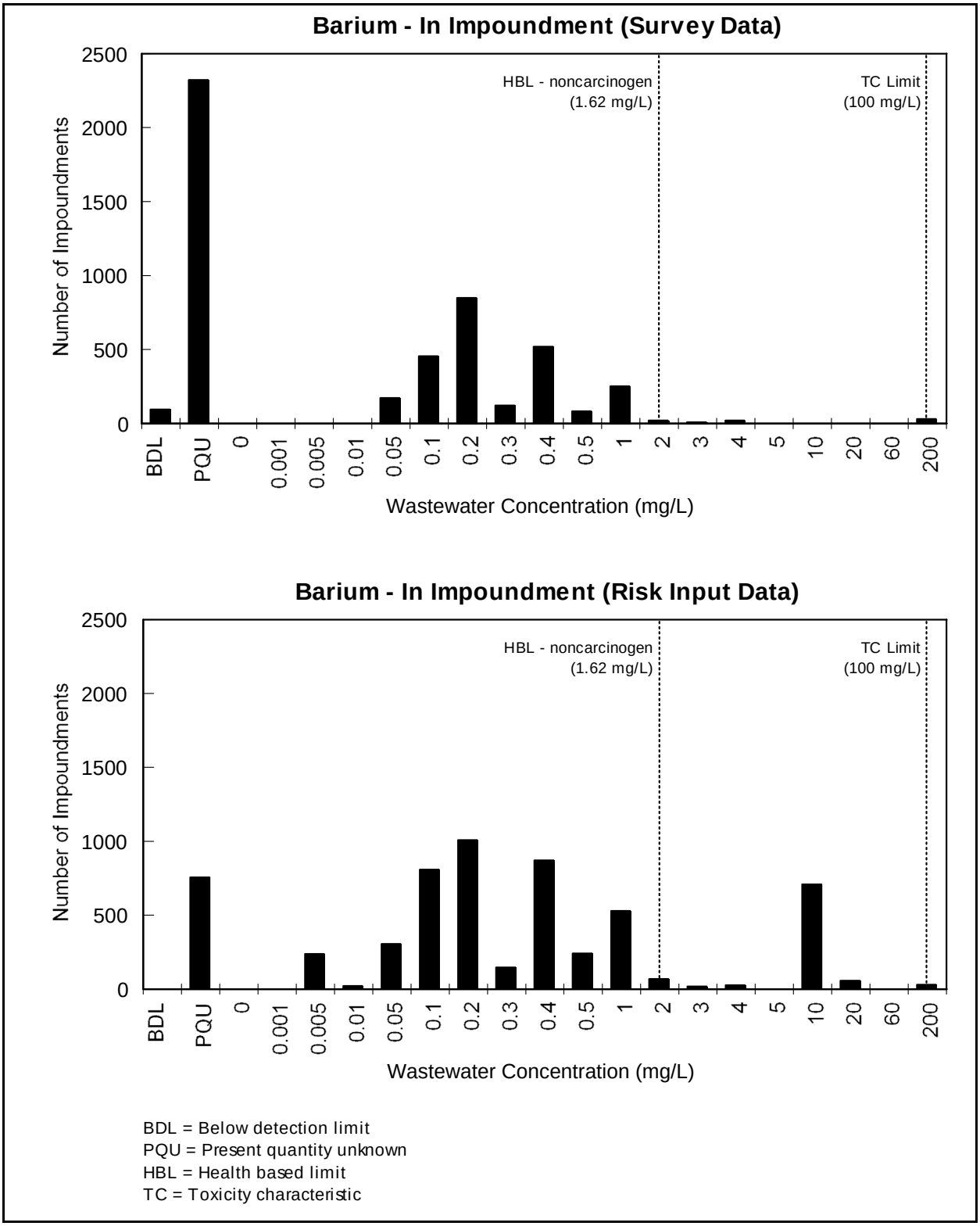

Figure B-6. Barium wastewater concentrations in impoundment (survey data vs. risk input data)

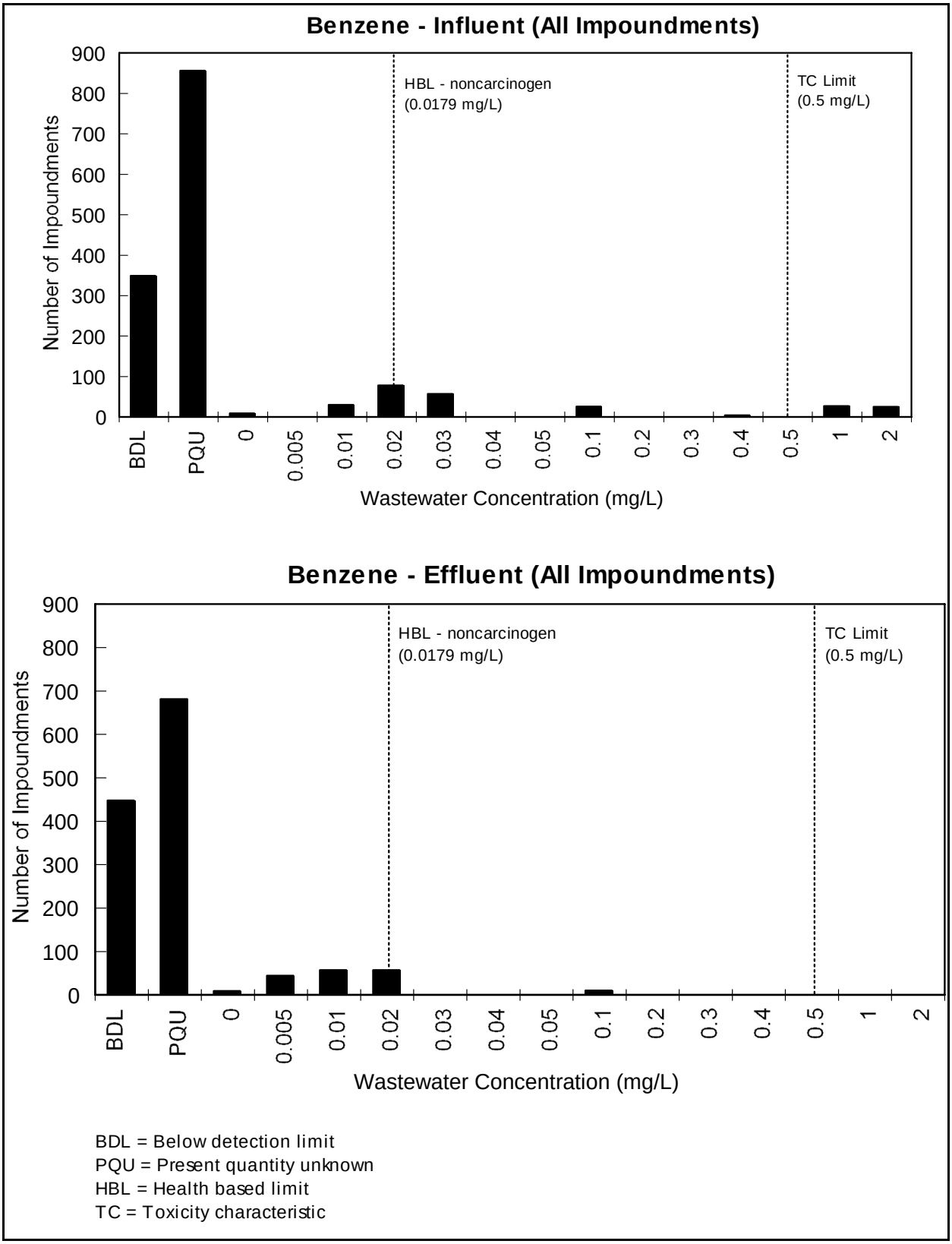

Figure B-7. Benzene influent and effluent wastewater concentrations.

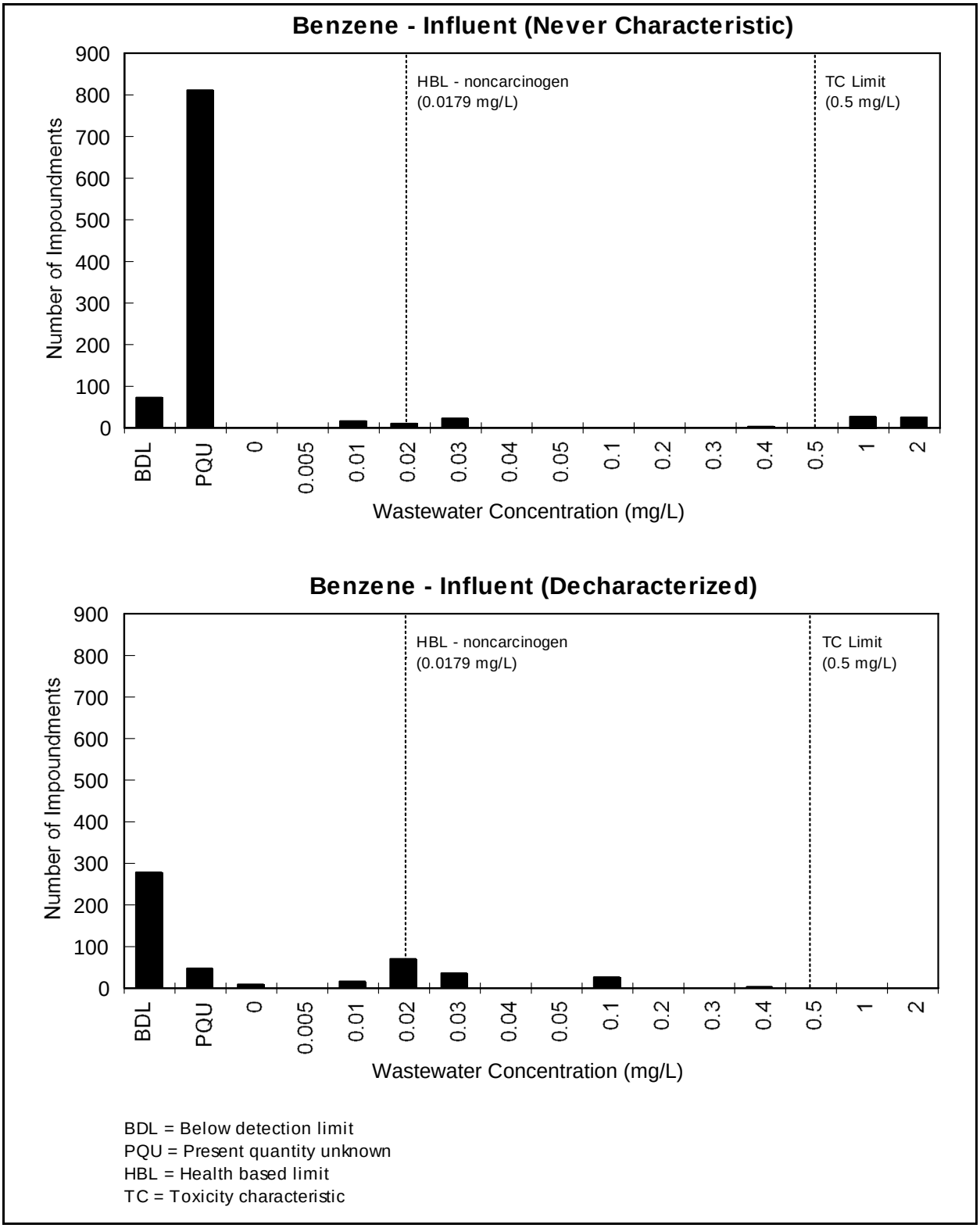

Figure B-8. Benzene influent wastewater concentrations by decharacterization status.

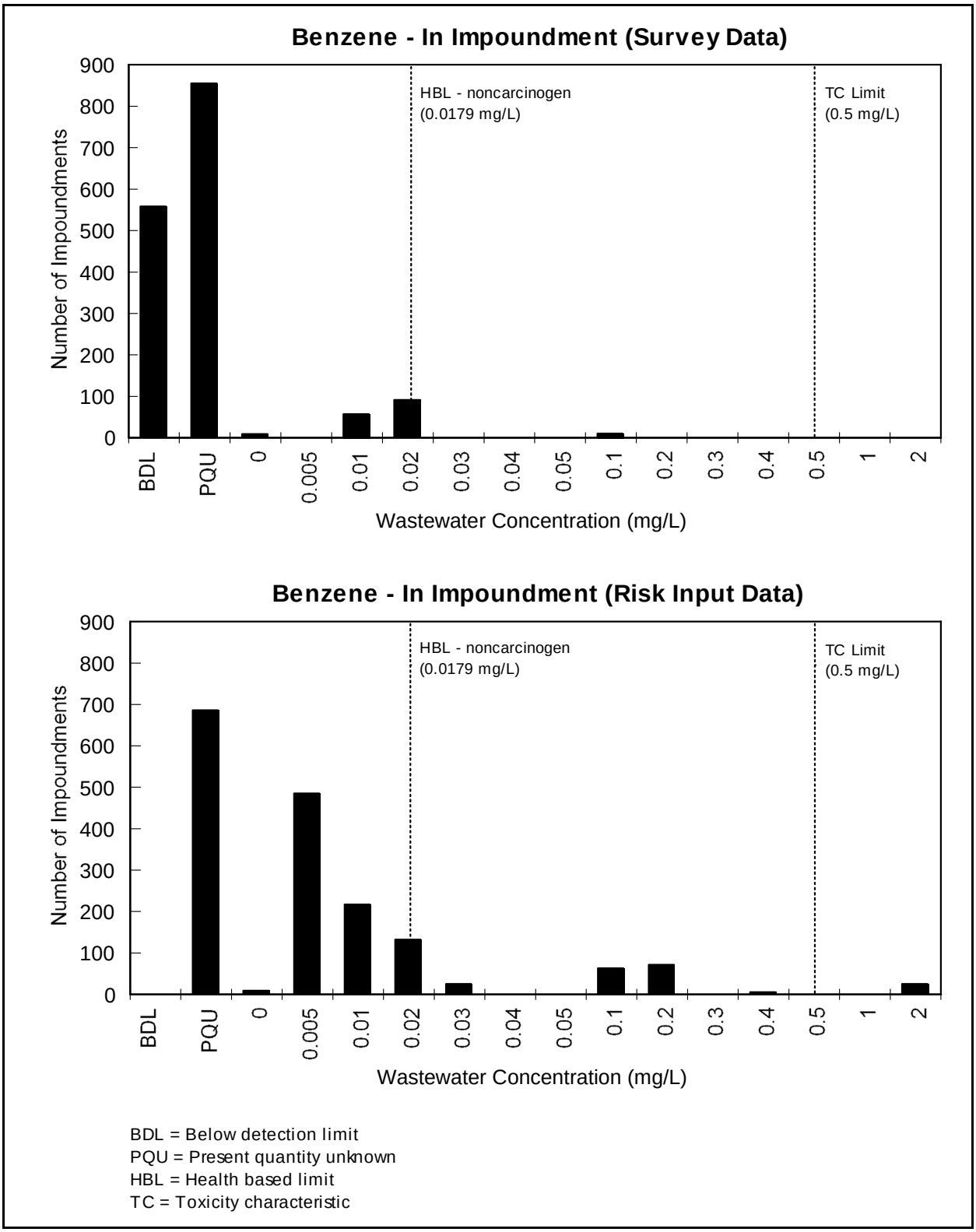

Figure B-9. Benzene wastewater concentrations in impoundment (survey data vs. risk input data).

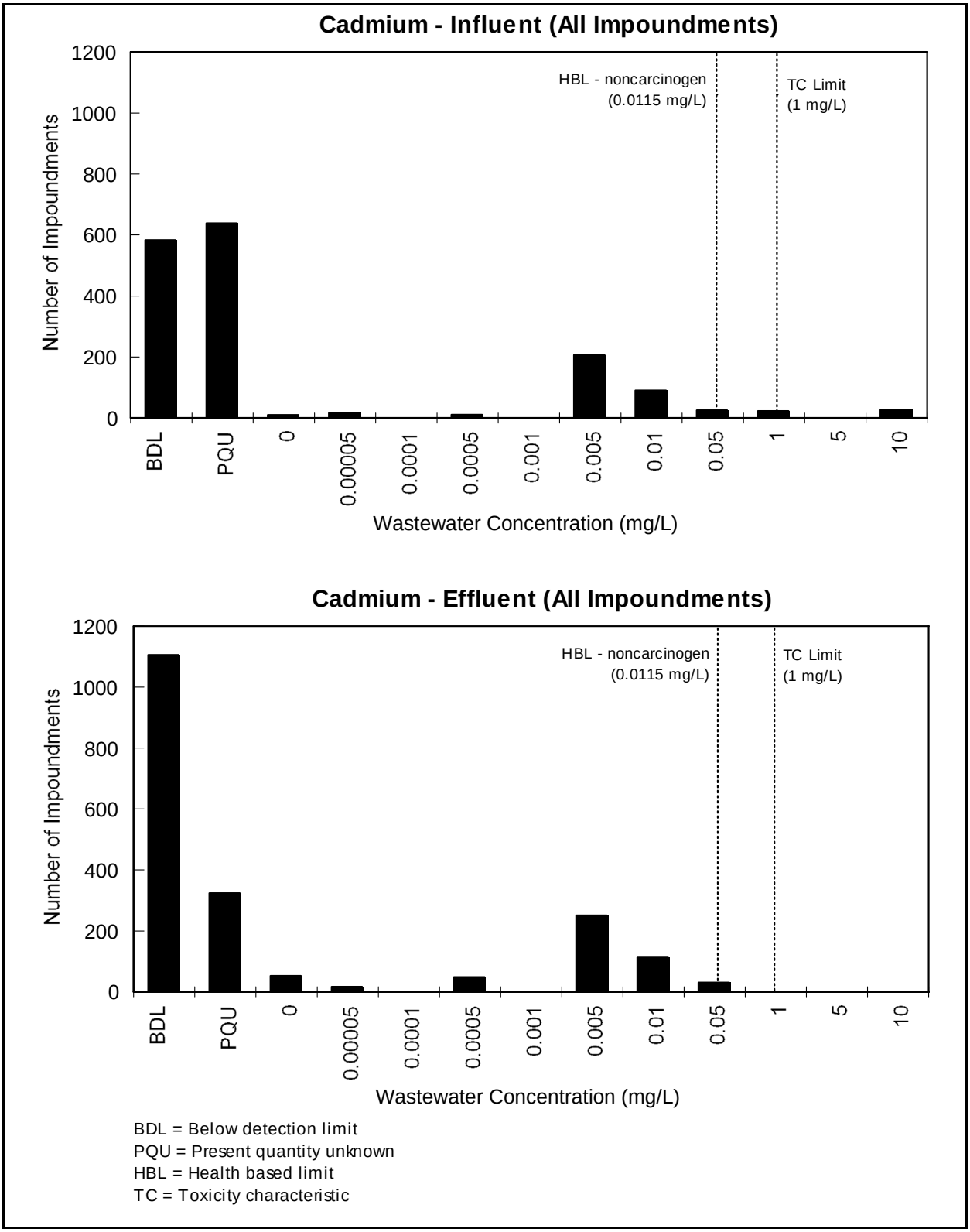

Figure B-10. Cadmium influent and effluent wastewater concentrations.

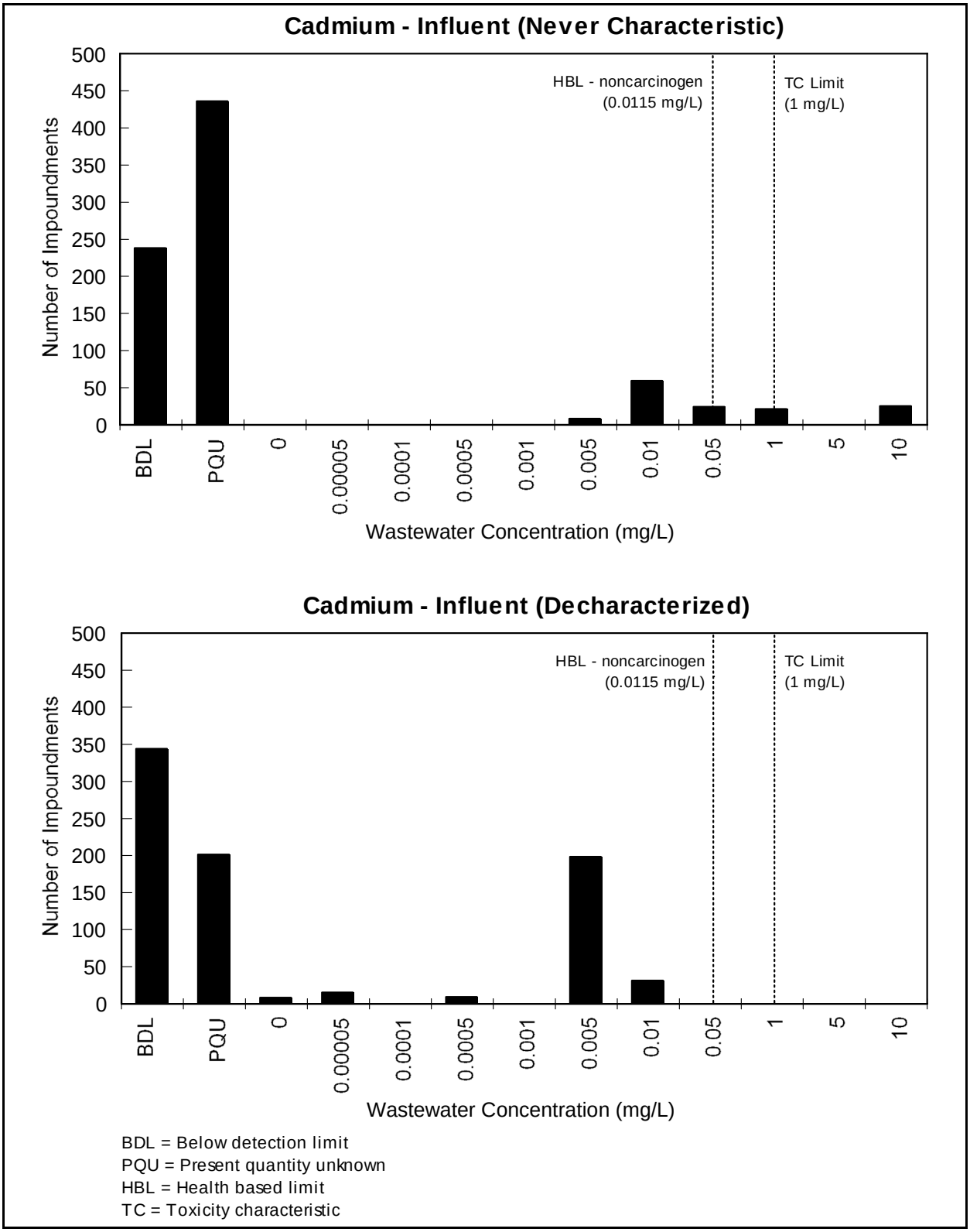

Figure B-11. Cadmium influent wastewater concentrations by decharacterization status.

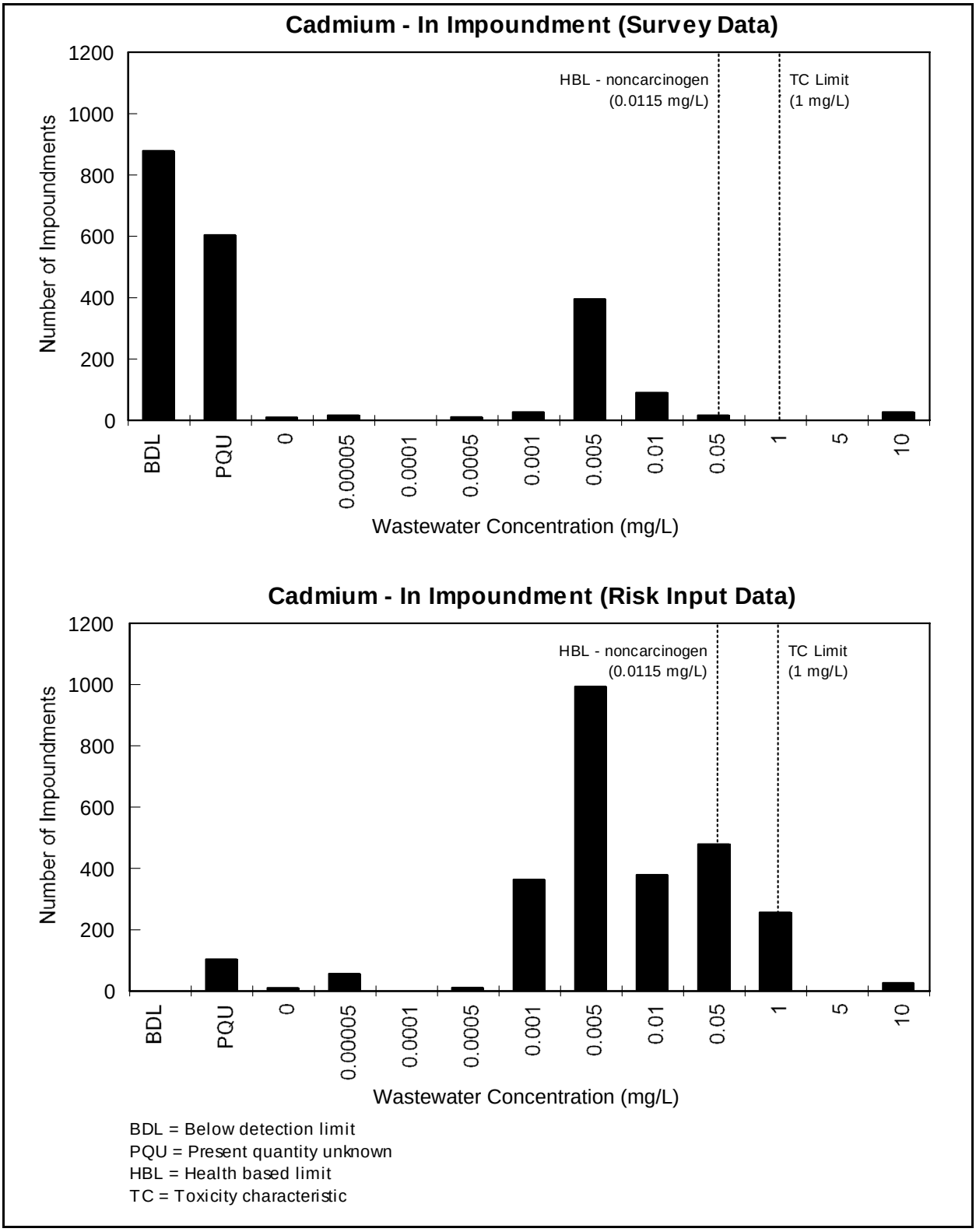

Figure B-12.Cadium wastewater concentrations in impoundment (survey data vs. risk input data).

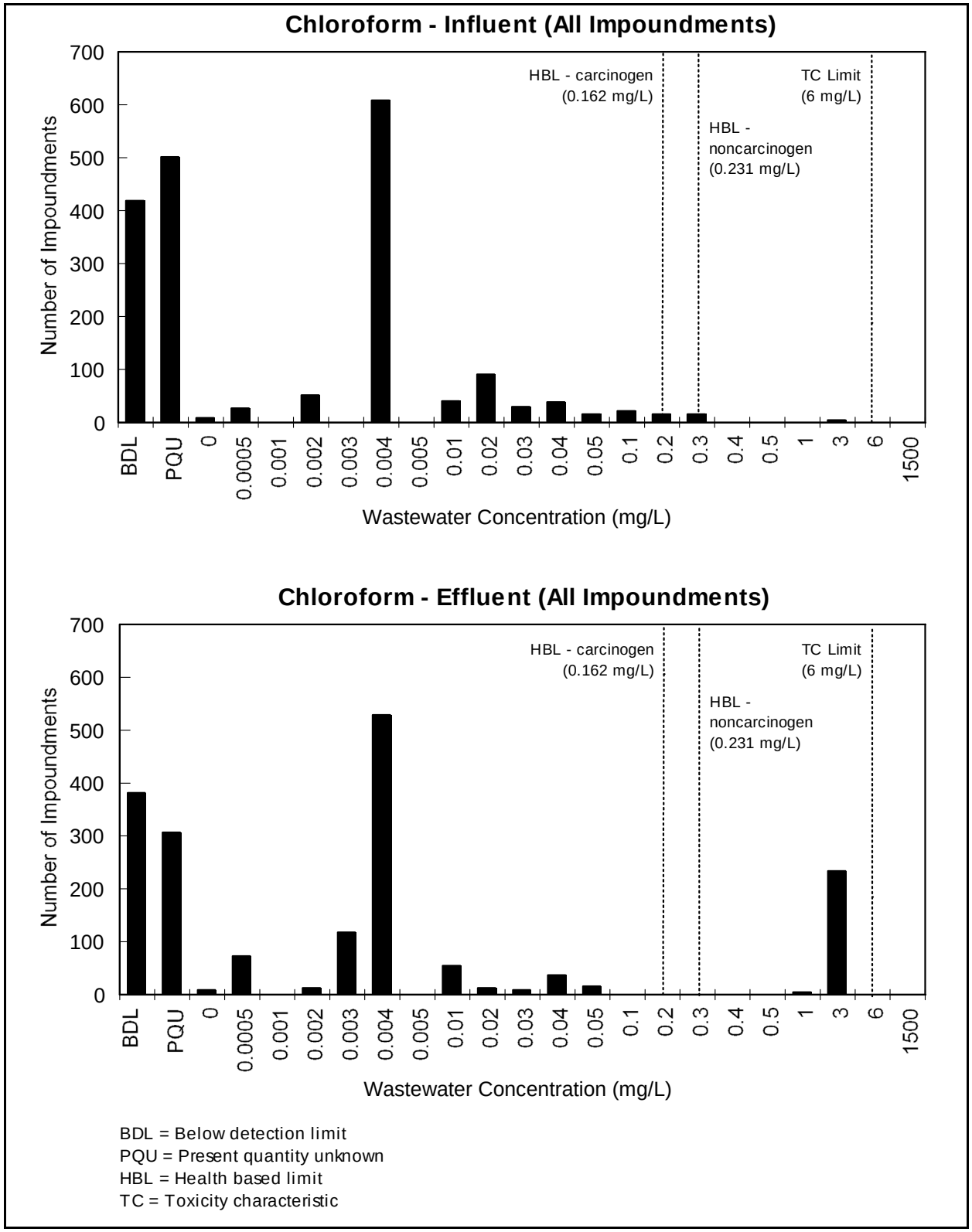

Figure B-13. Chloroform influent and effluent wastewater concentrations.

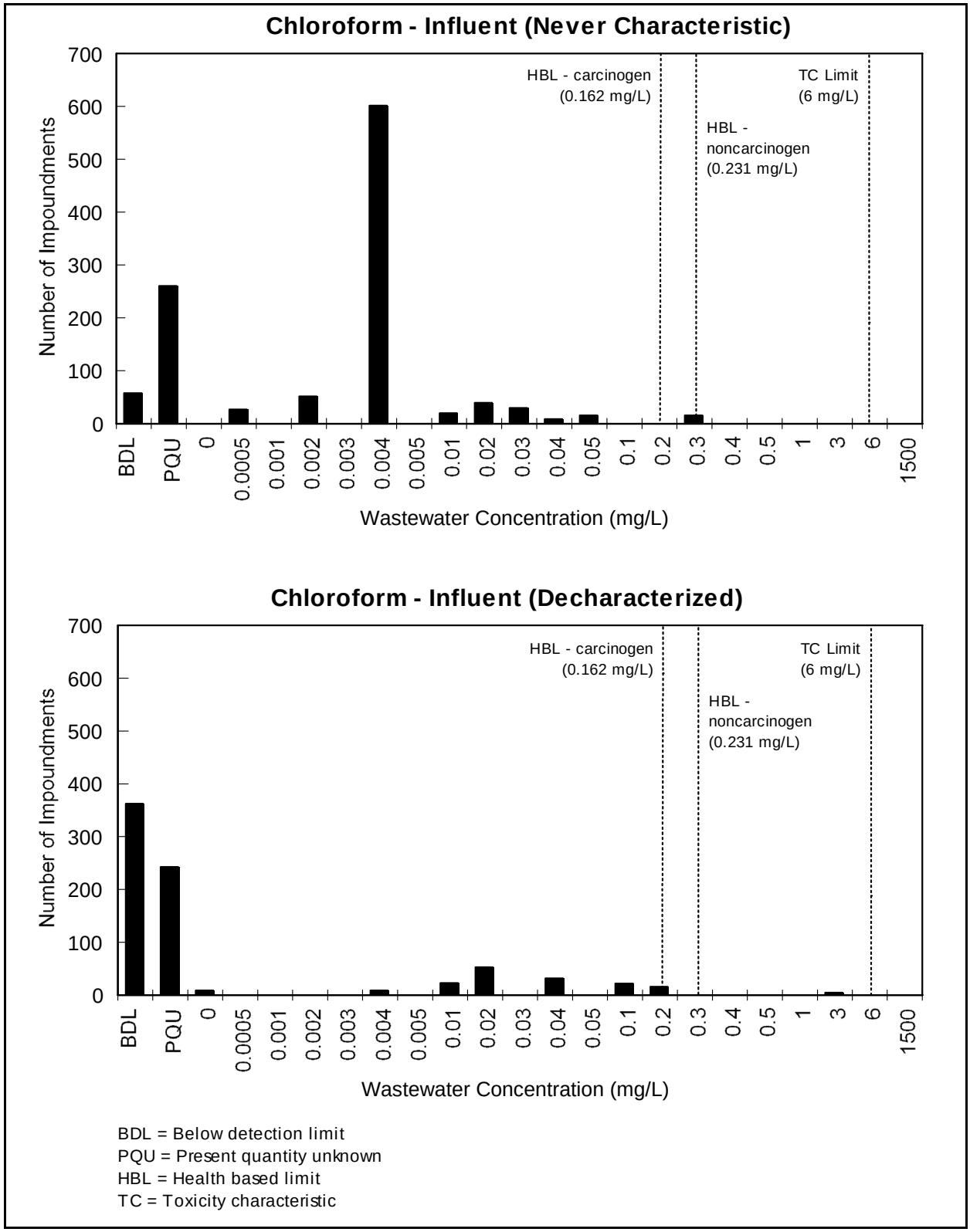

Figure B-14. Chloroform influent wastewater concentrations by decharacterization status.

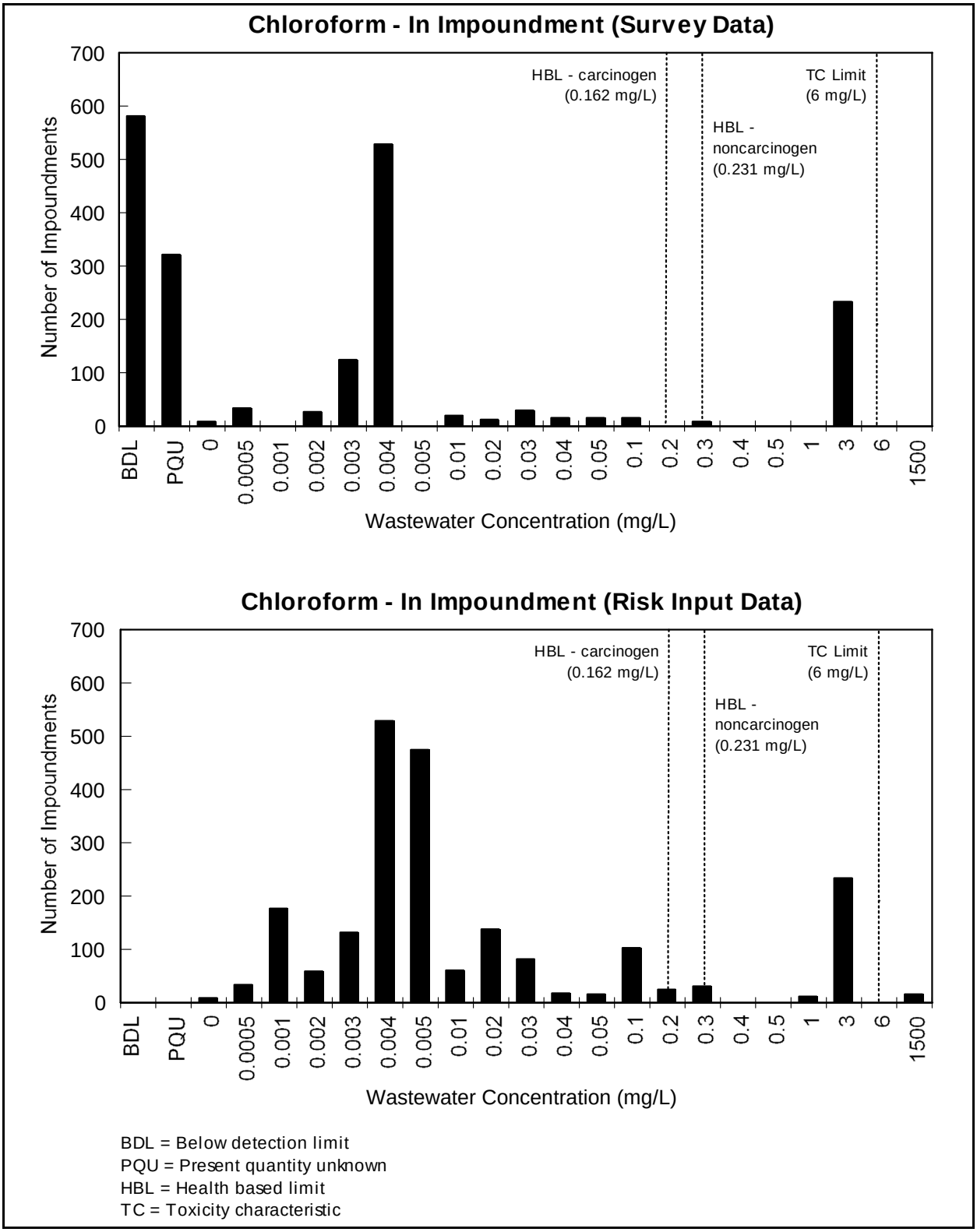

Figure B-15. Chloroform wastewater concentrations in impoundment (survey data vs. risk input data).

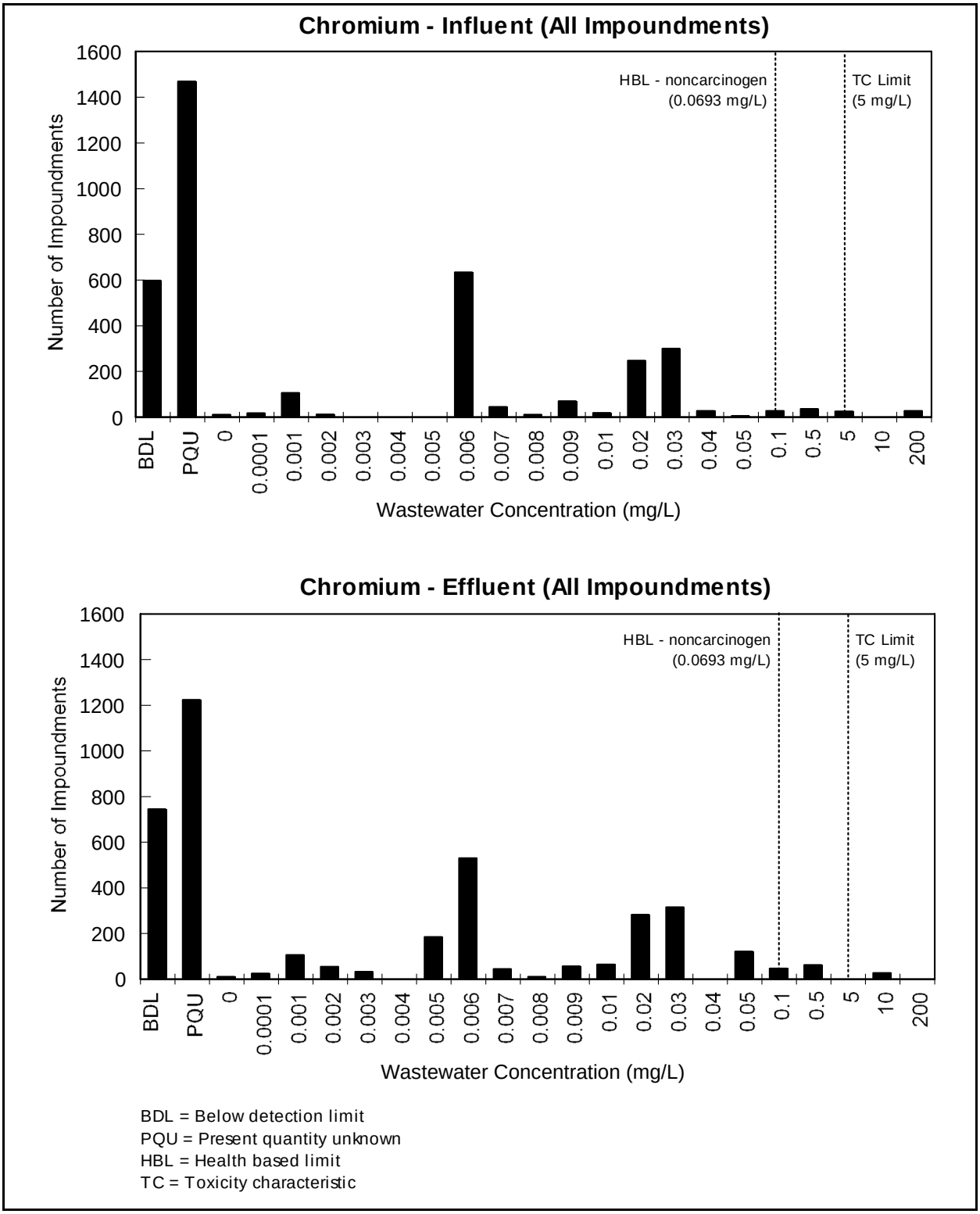

Figure B-16. Chromium influent and effluent wastewater concentrations.

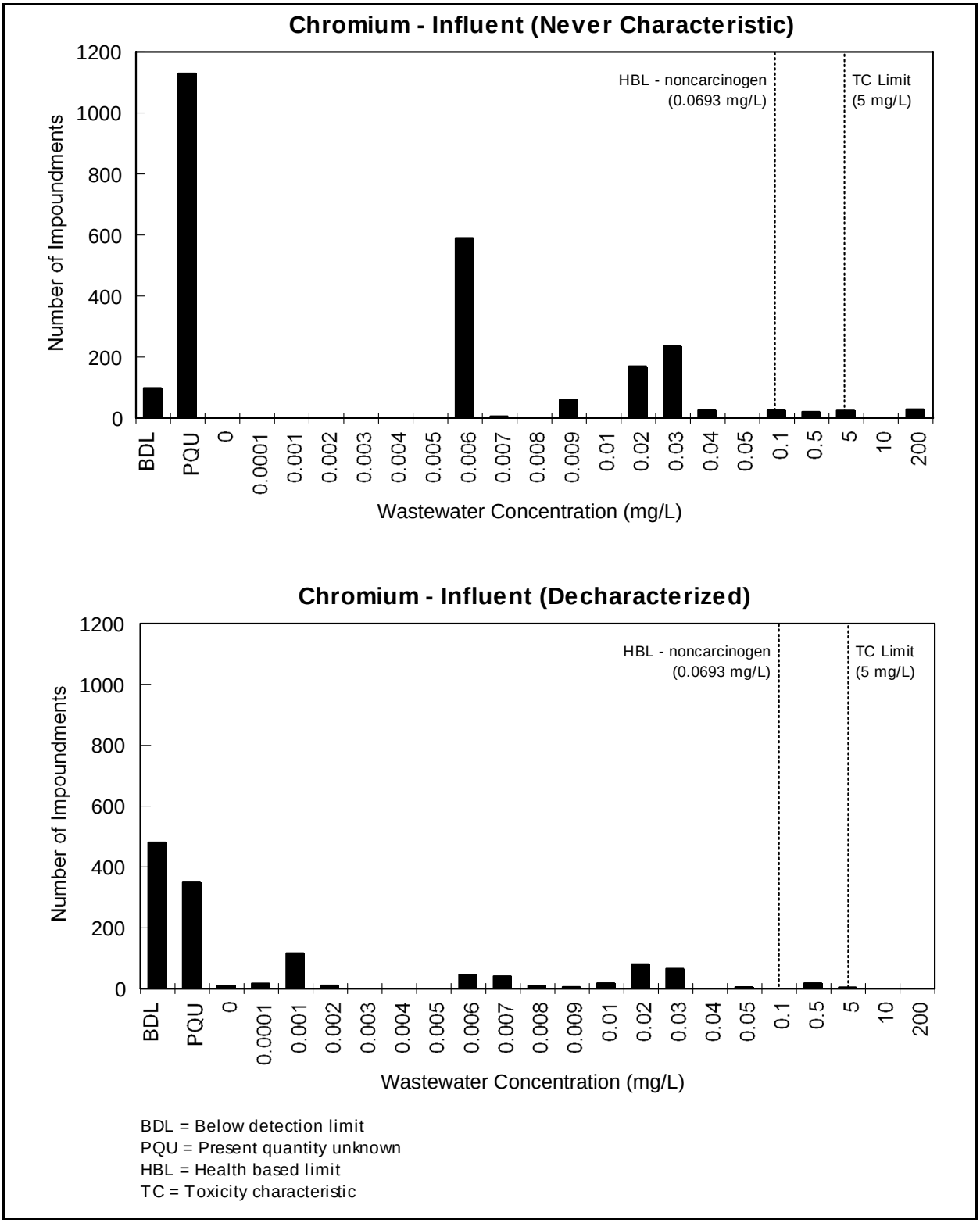

Figure B-17. Chromium influent wastewater concentrations by decharacterization status.

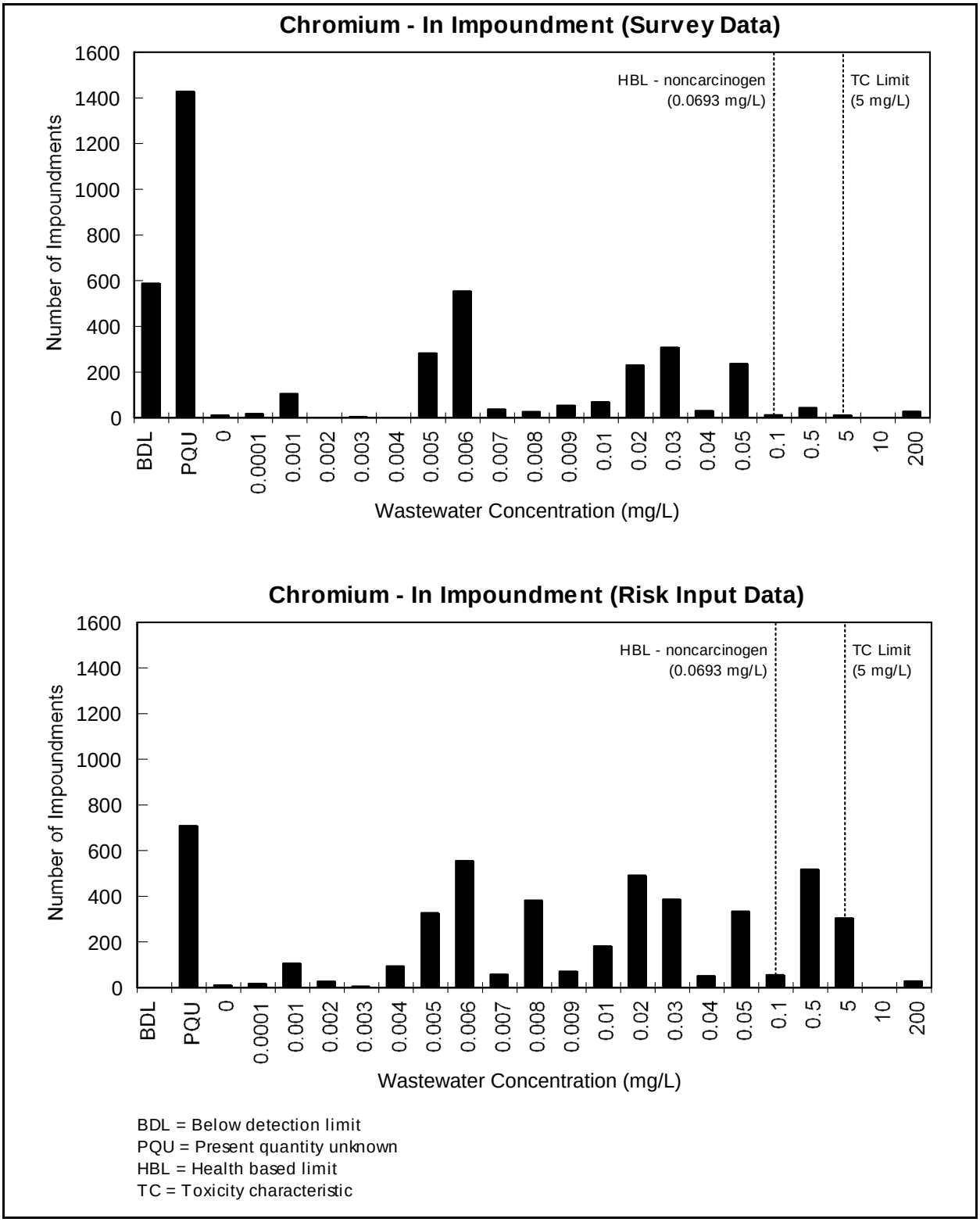

Figure B-18. Chromium wastewater concentrations in impoundment (survey data vs. risk input data).

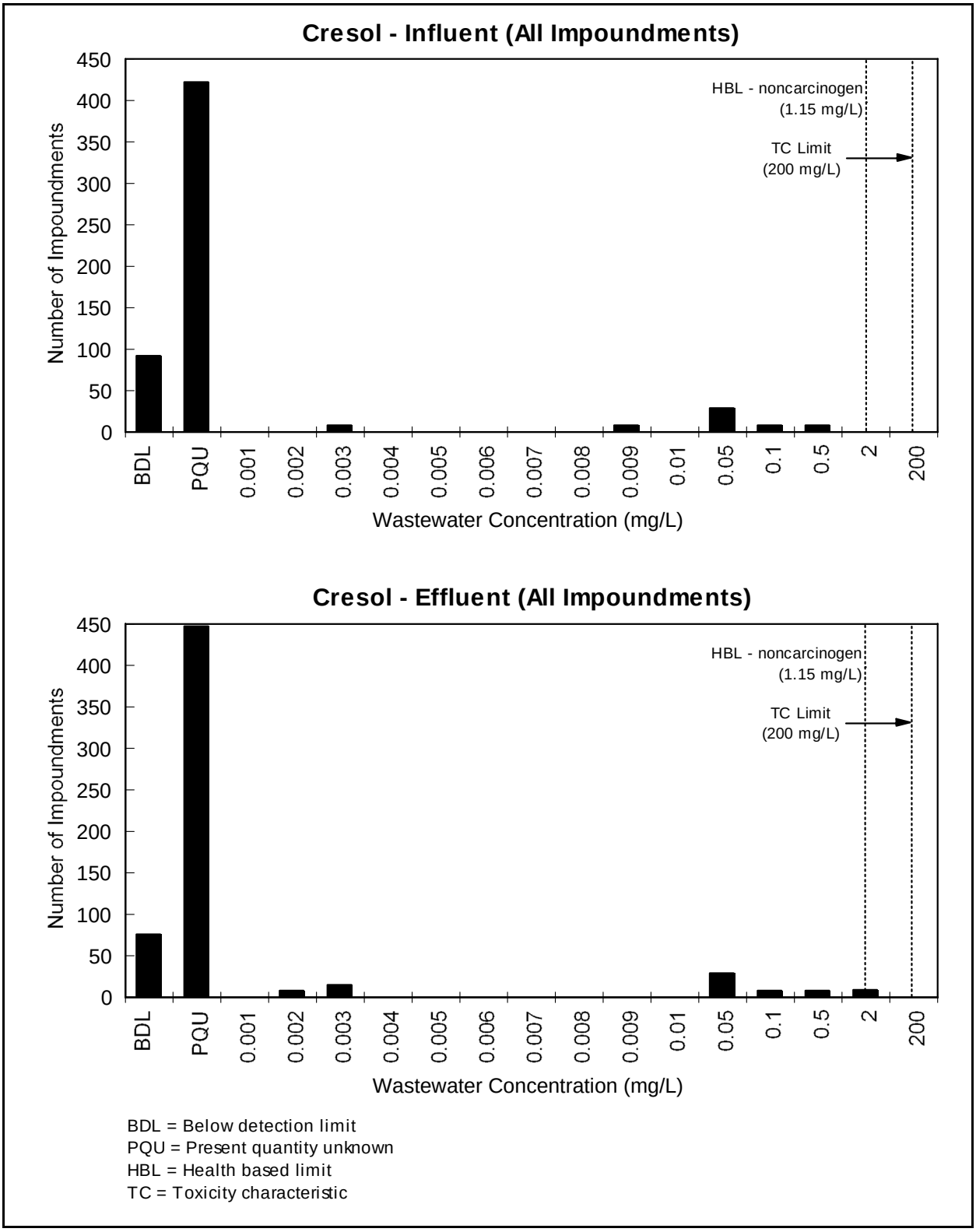

Figure B-19. Cresol influent and effluent wastewater concentrations.

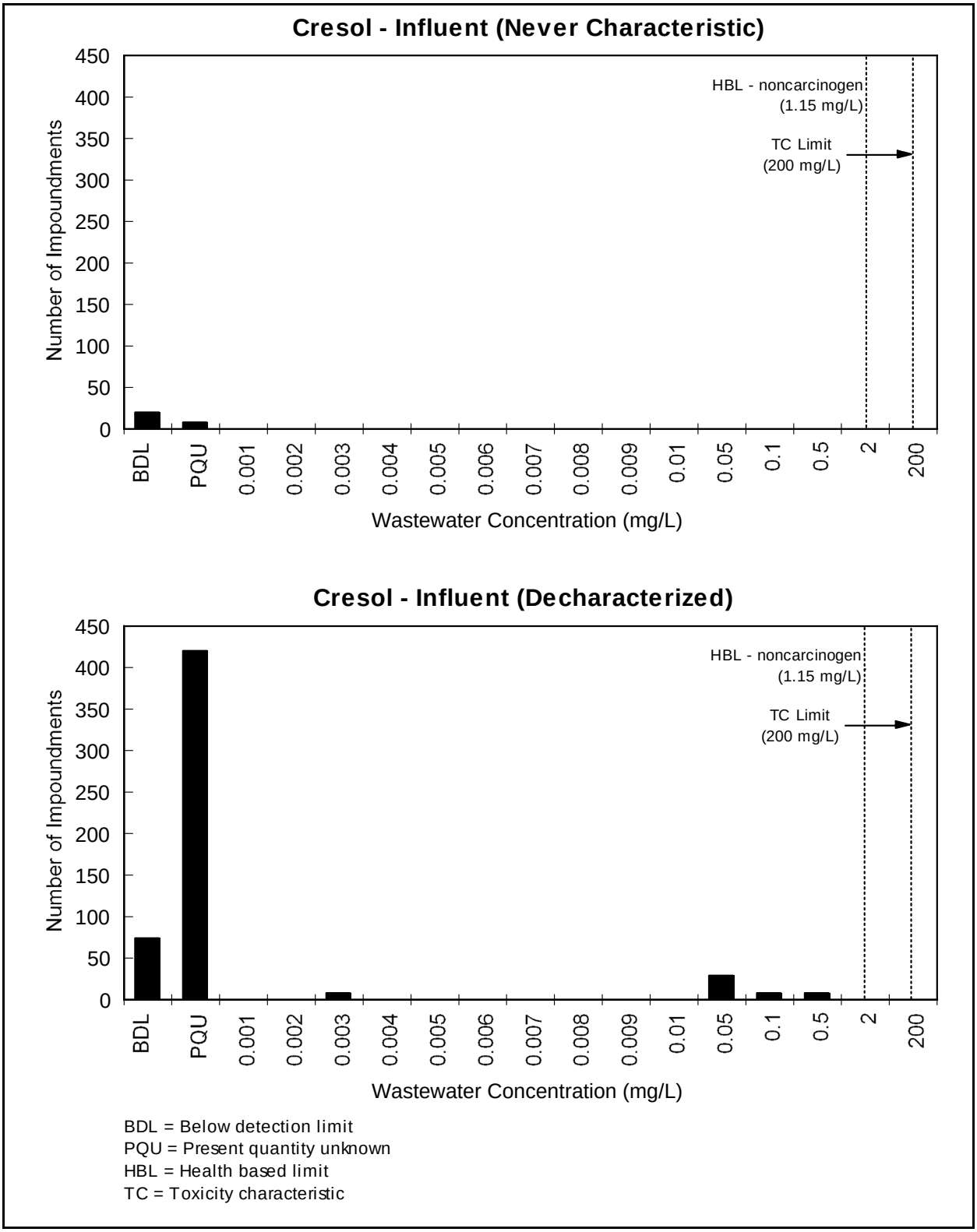

Figure B-20. Cresol influent wastewater concentrations by decharacterization status.

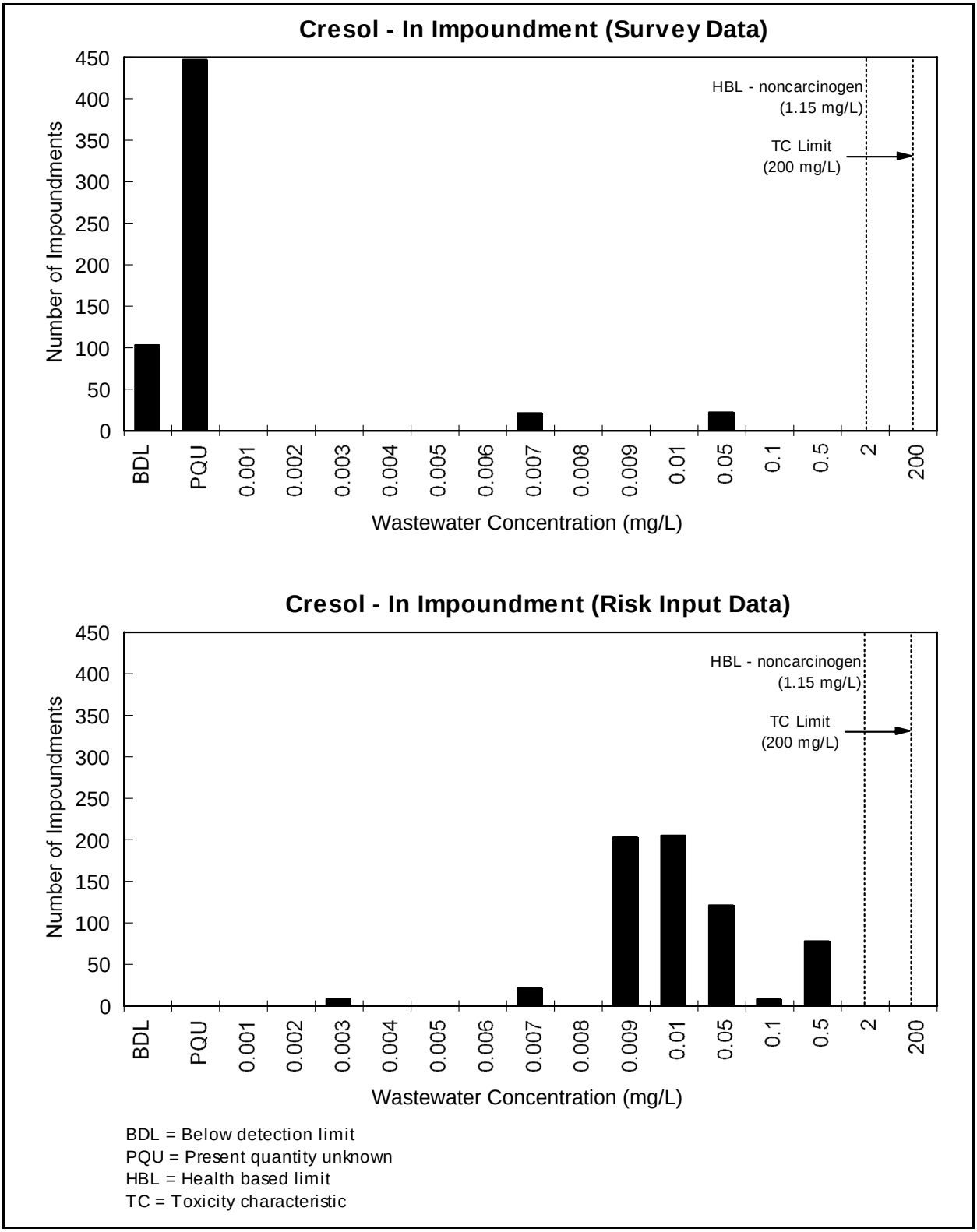

Figure B-21. Cresol wastewater concentrations in impoundment (survey data vs. risk input data).

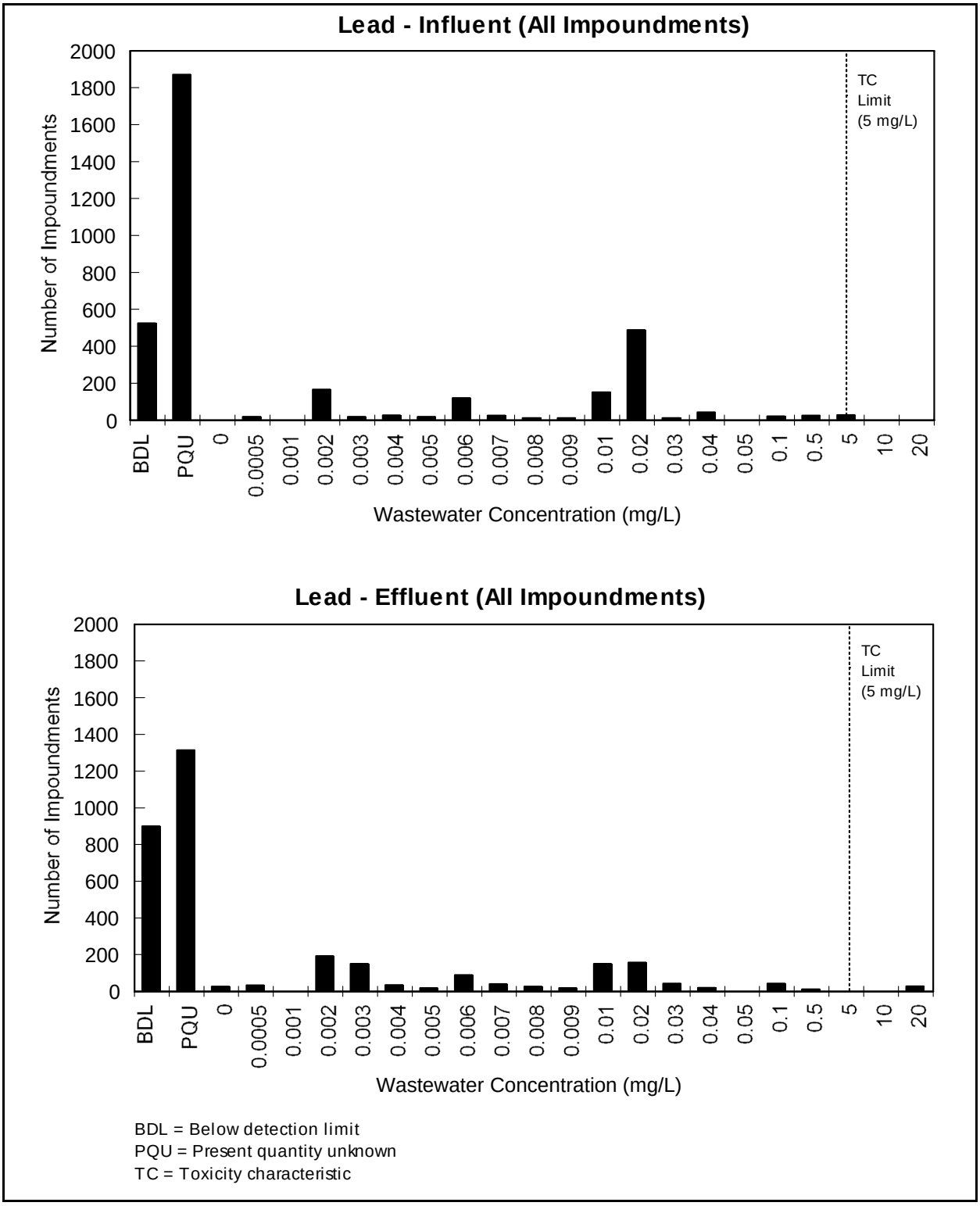

Figure B-22. Lead influent and effluent wastewater concentrations.

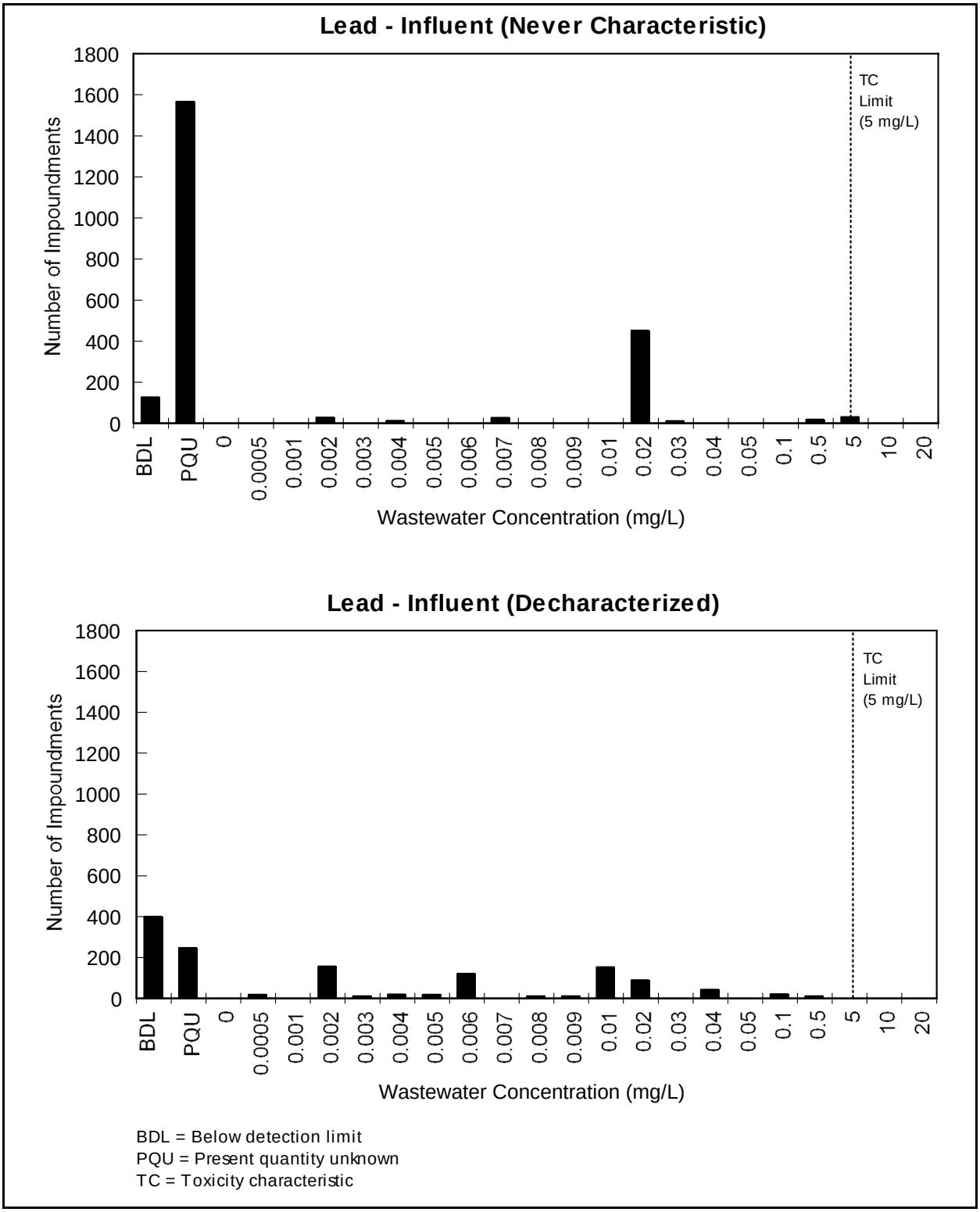

Figure B-23. Lead influent wastewater concentrations by decharacterization status.

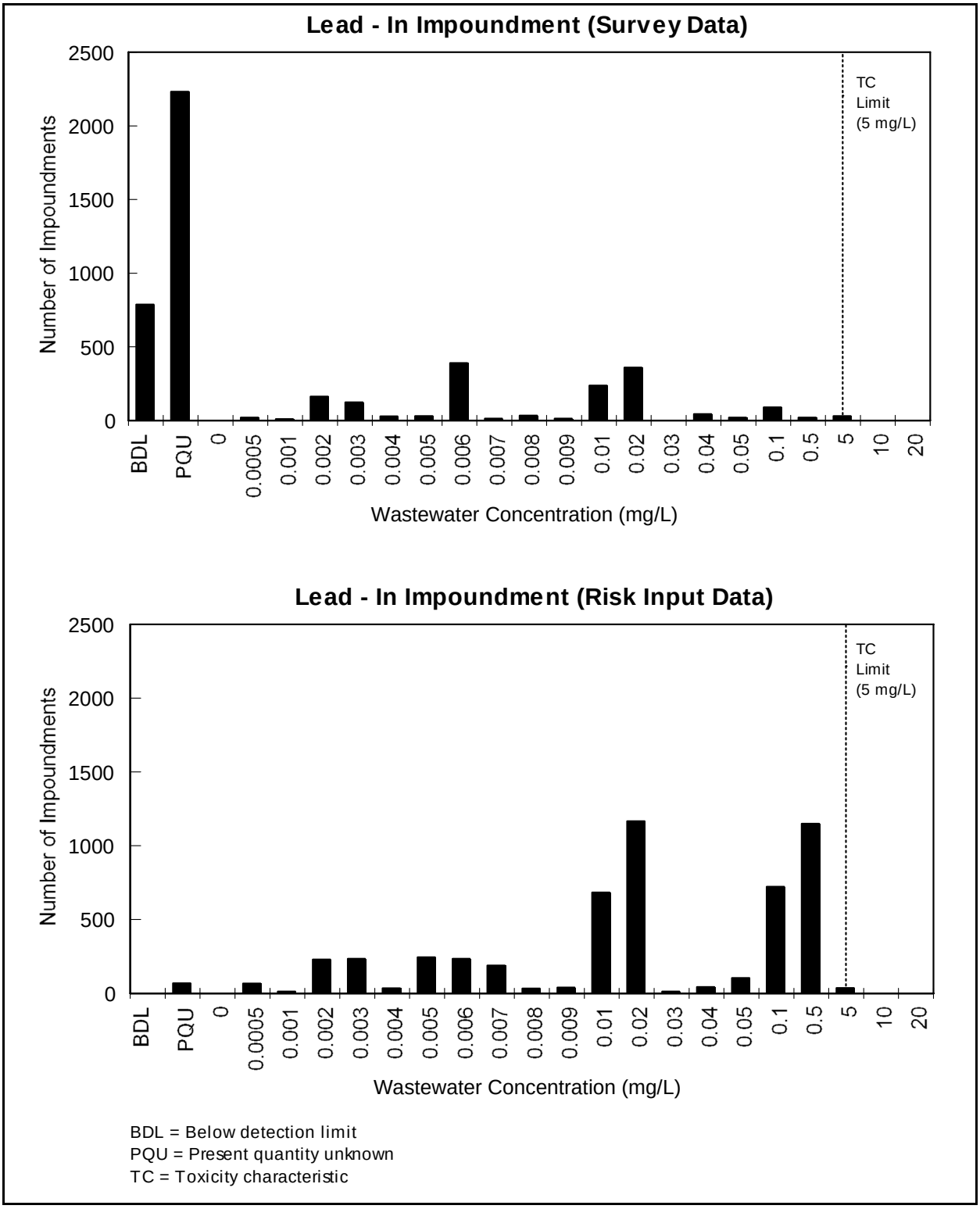

Figure B-24. Lead wastewater concentrations in impoundment (survey data vs. risk input data).

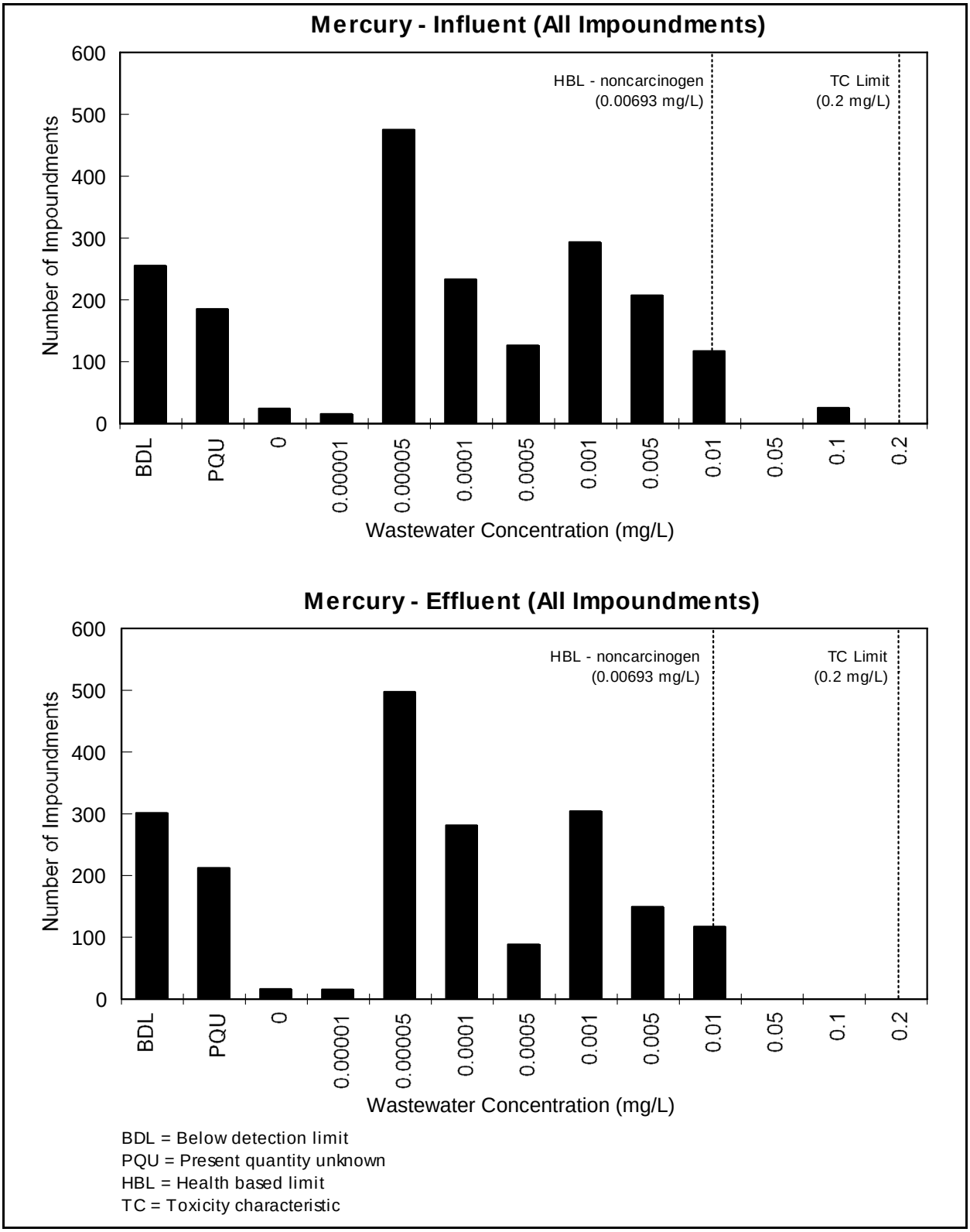

Figure B-25. Mercury influent and effluent wastewater concentrations.

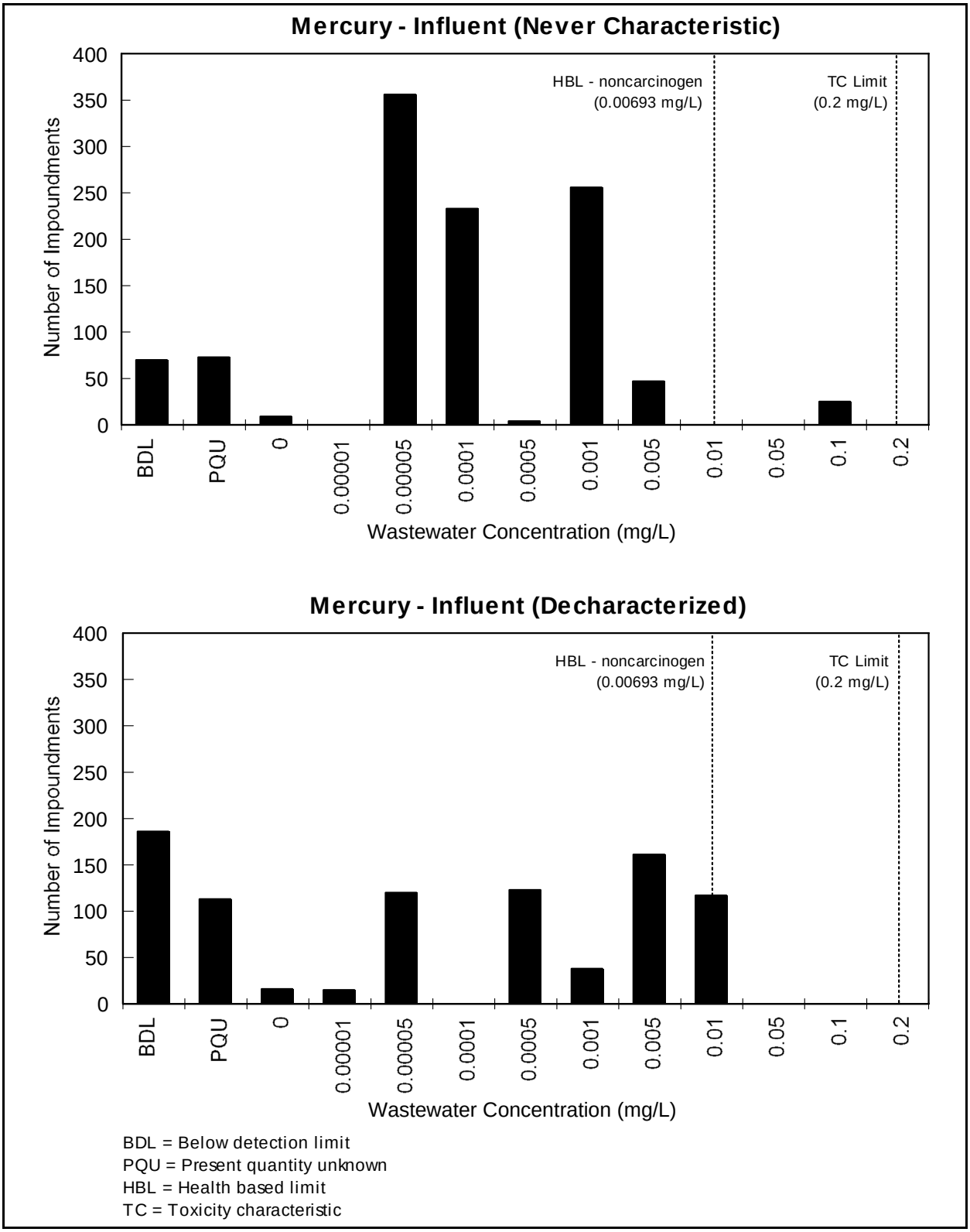

Figure B-26. Mercury influent wastewater concentrations by decharacterization status.

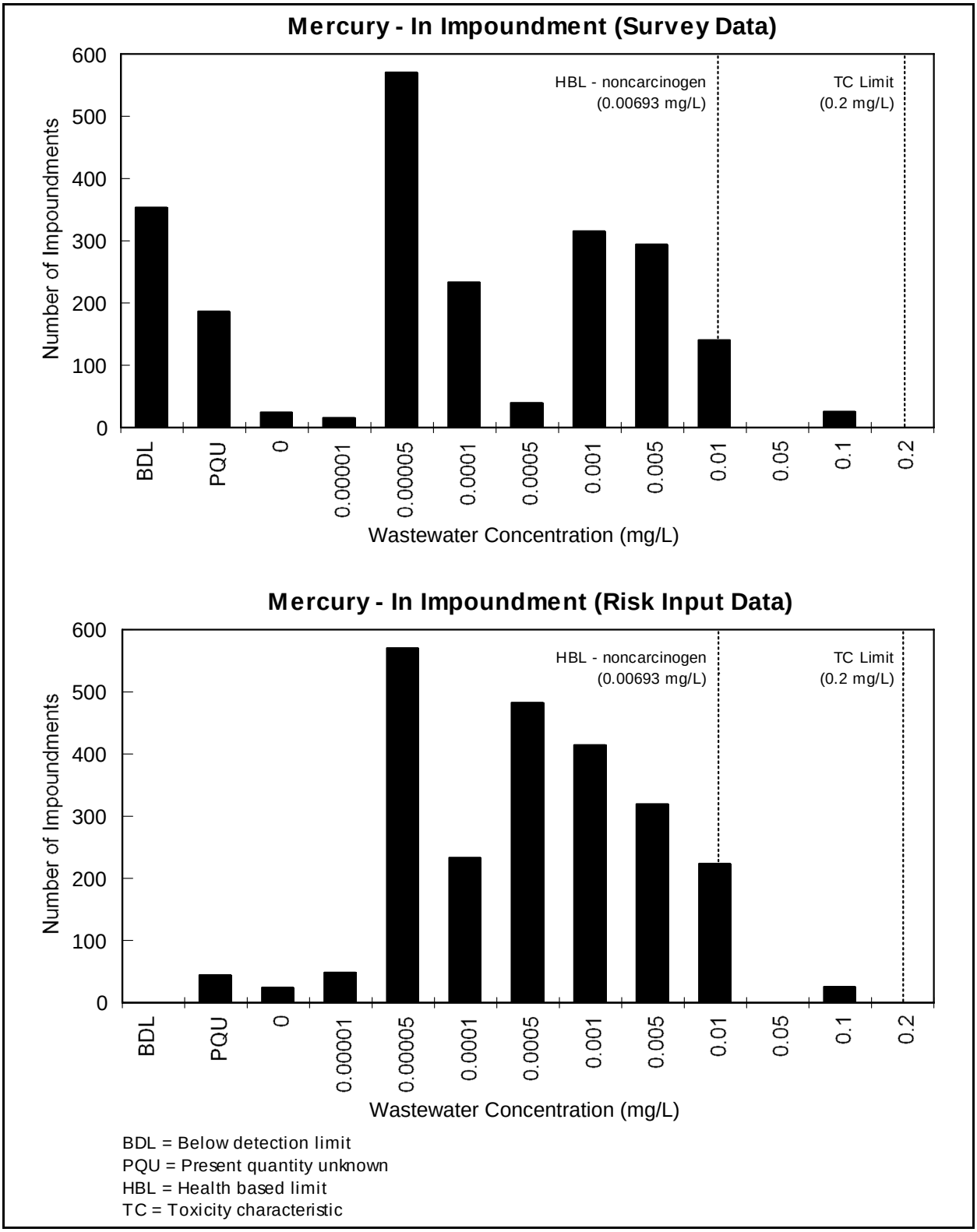

Figure B-27. Mercury wastewater concentrations in impoundment (survey data vs. risk input data).

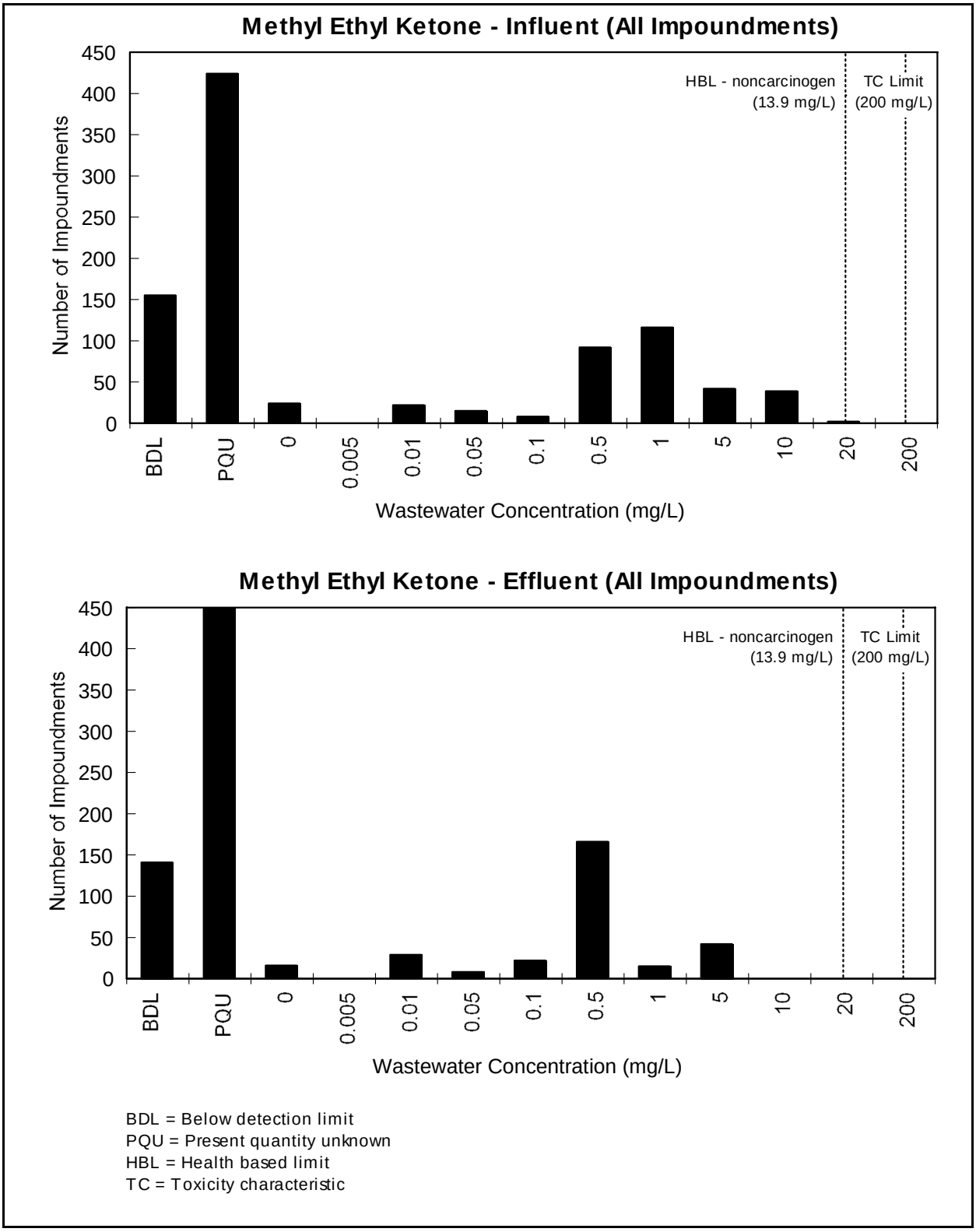

Figure B-28. Methyl ethyl ketone (MEK) influent and effluent wastewater concentrations.

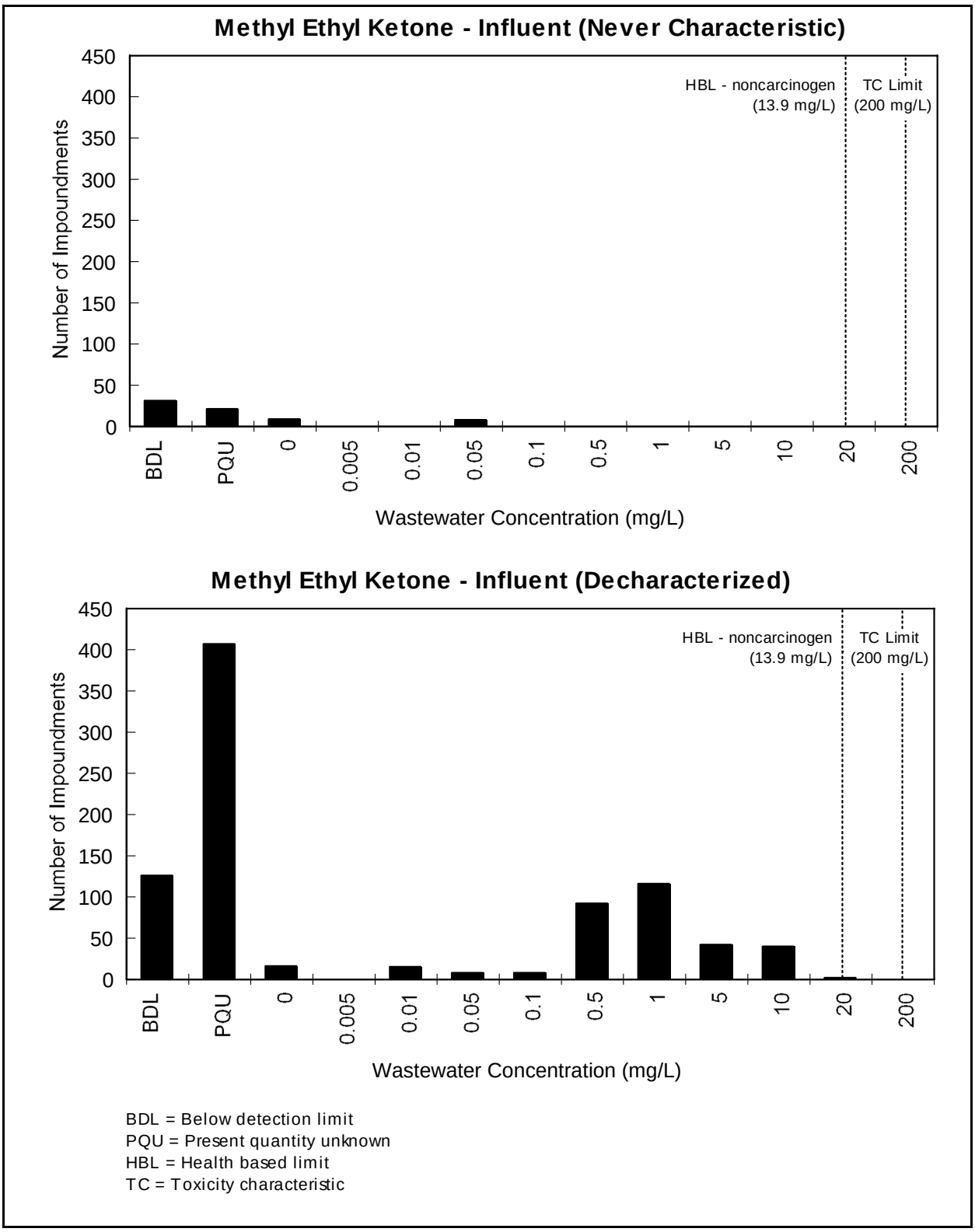

Figure B-29. Methyl ethyl ketone (MEK) influent wastewater concentrations by decharacterization status.

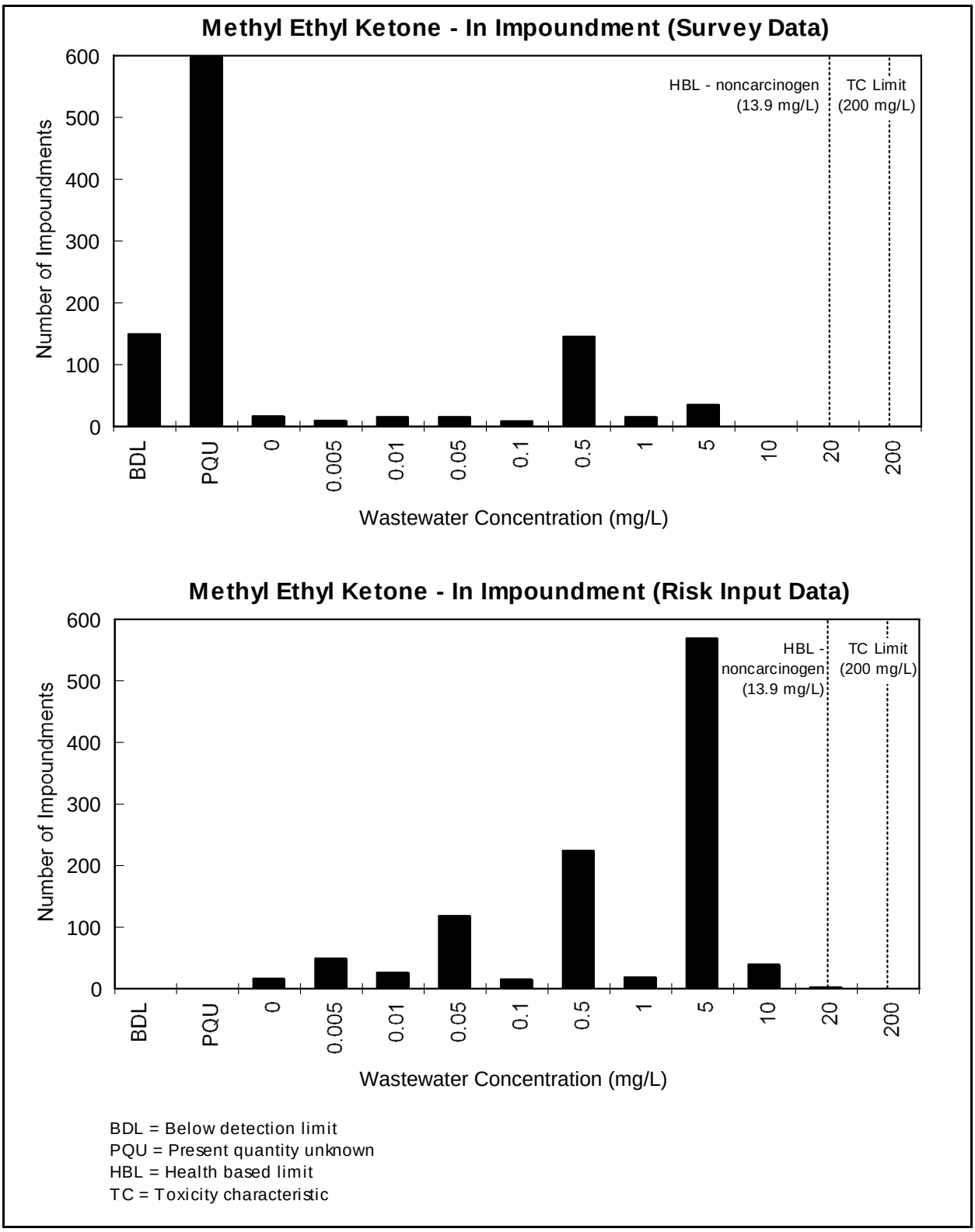

Figure B-30. Methyl ethyl ketone (MEK) wastewater concentrations in impoundment (survey data vs. risk input data).

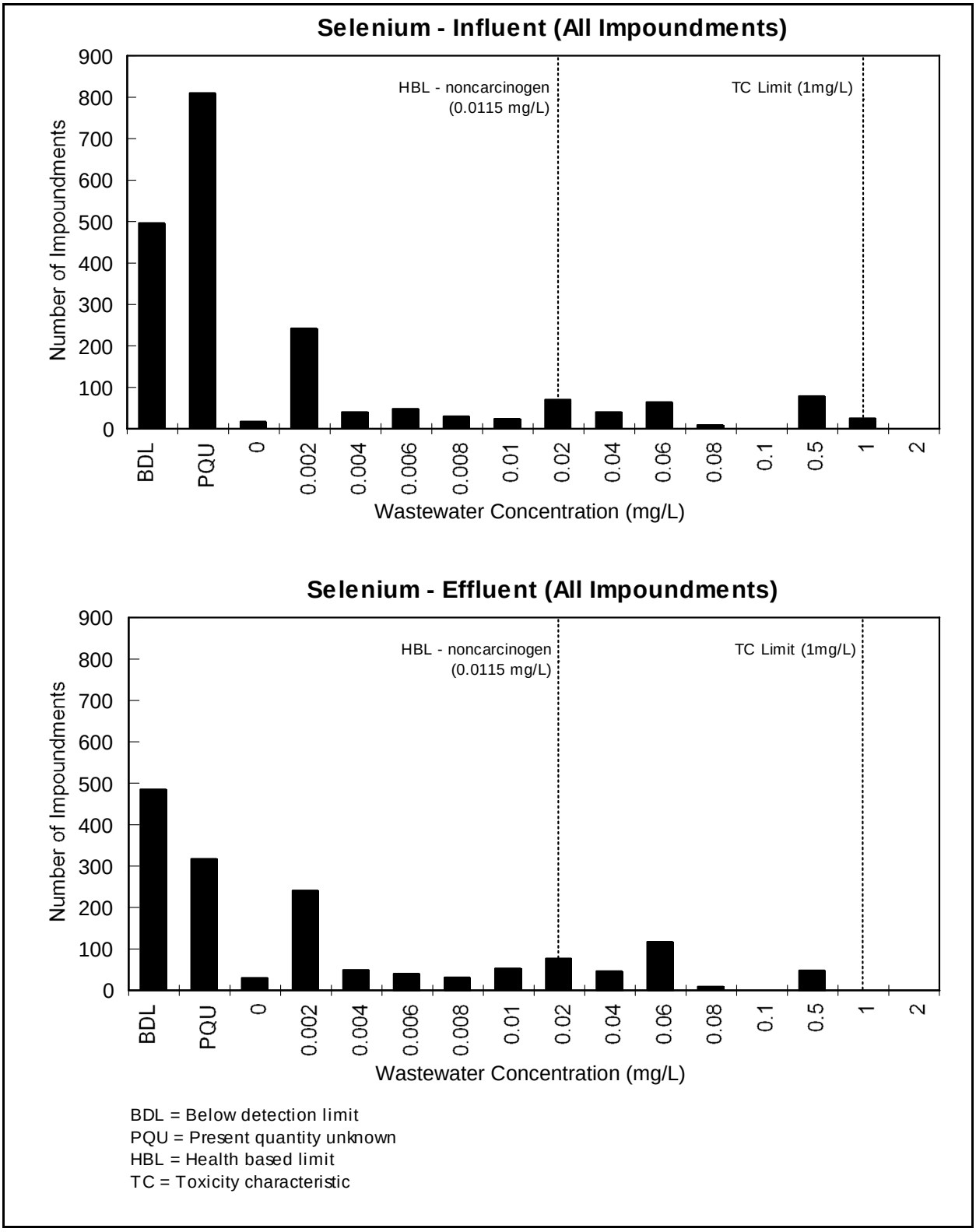

Figure B-31. Selenium influent and effluent wastewater concentrations.

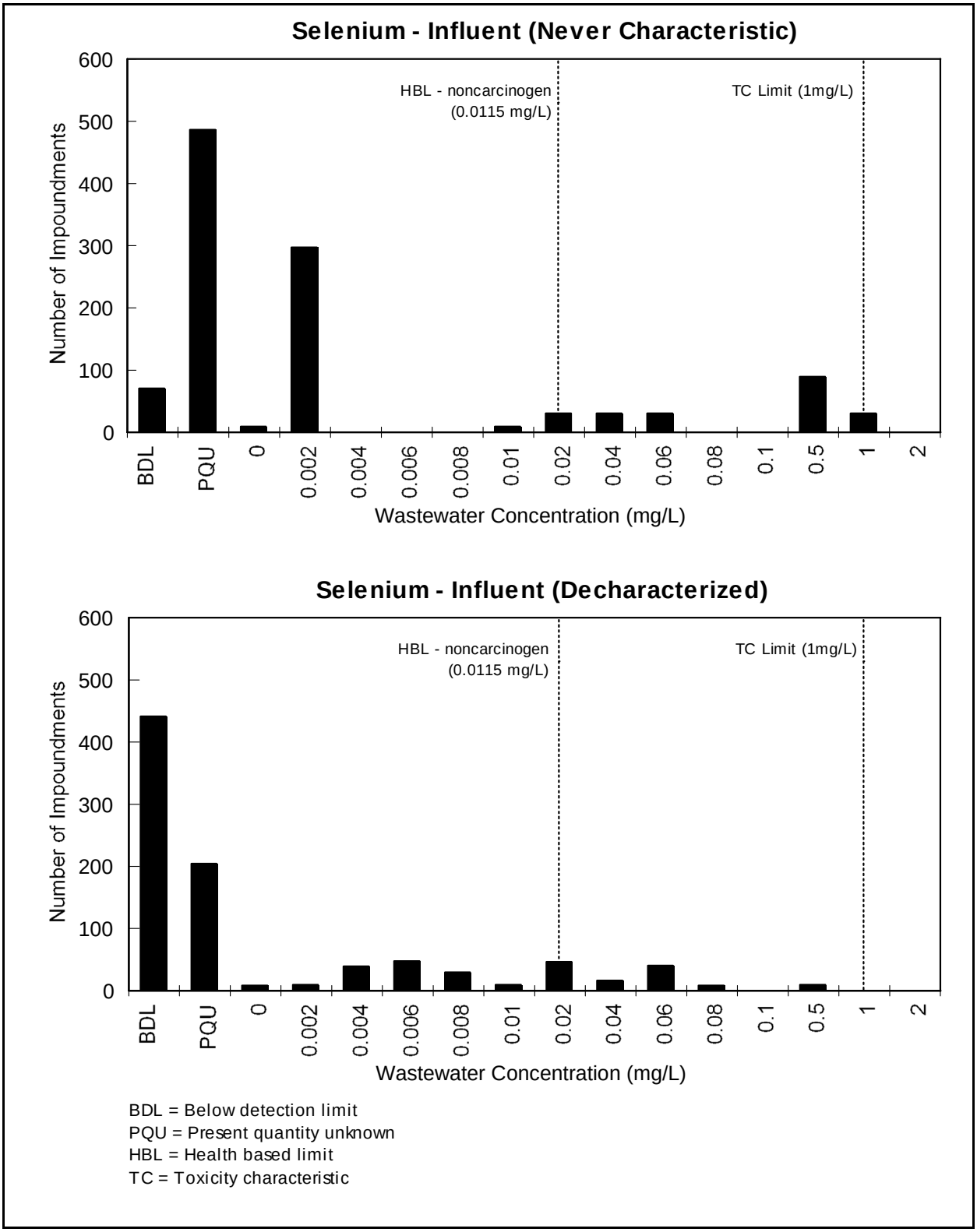

Figure B-32. Selenium influent wastewater concentrations by decharacterization status.

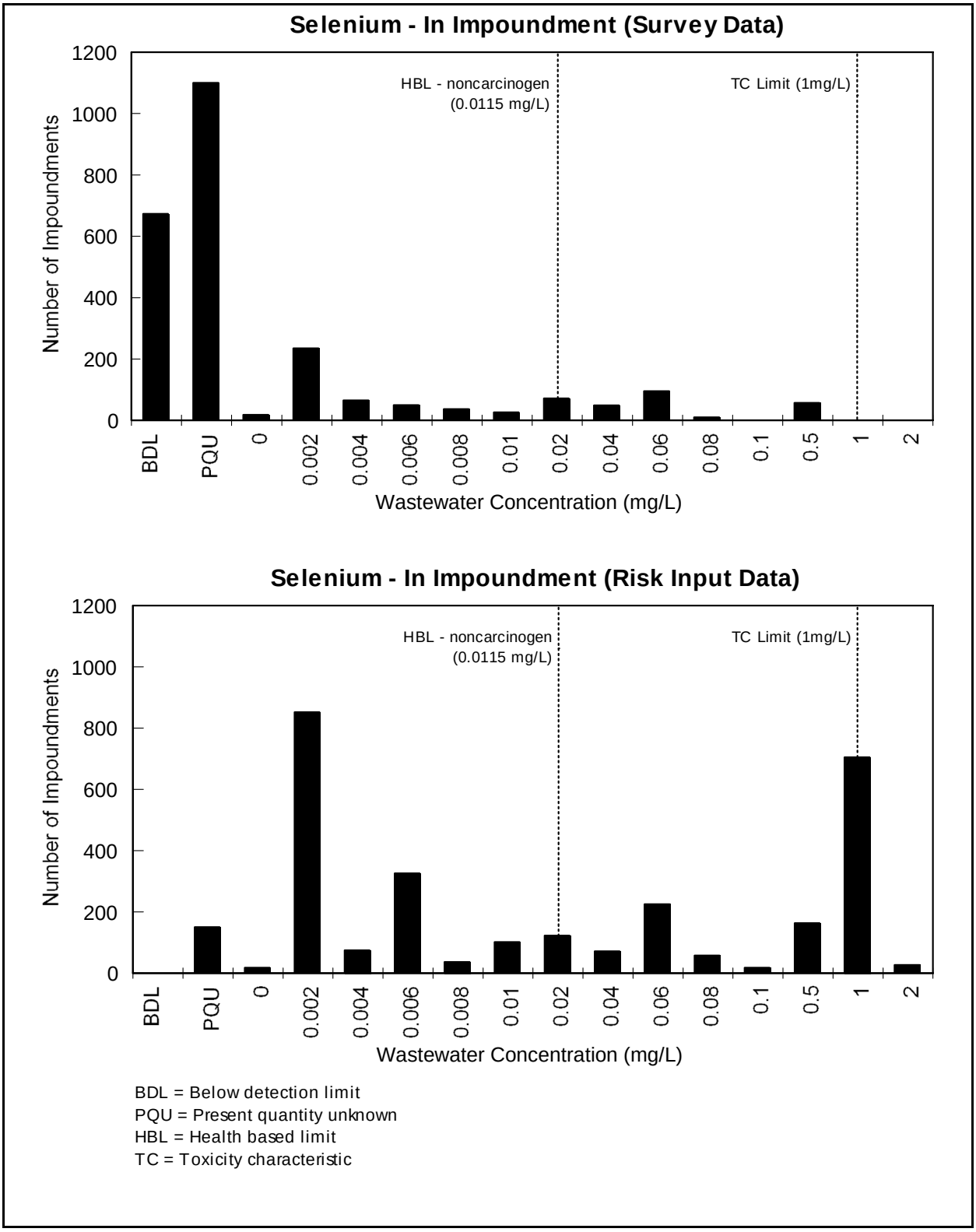

Figure B-33. Selenium wastewater concentrations in impoundment (survey data versus risk input data).